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**NATIONAL INSTITUTE OF TECHNOLOGY  
ROURKELA**

**10<sup>TH</sup> CONVOCAATION  
2013**

**19 January 2013**

*Chief Guest*

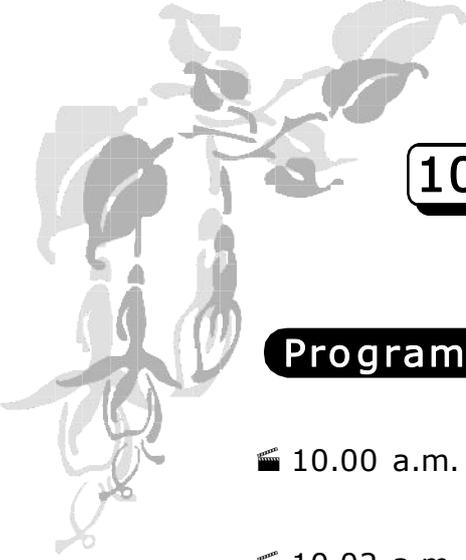
**Dr. V. K. Saraswat**

Scientific Adviser to Raksha Mantri  
Secretary, Defence R&D and Director General, DRDO

**Prof. S. K. Sarangi**  
Director

**Sri B. S. Sudhir Chandra**  
Chairman, Board of Governors

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## 10<sup>th</sup> ANNUAL CONVOCATION

19 January 2013

### Programme

- 🎬 10.00 a.m. : Academic Procession Arrives  
(All present may kindly rise)
- 🎬 10.02 a.m. : Invocation
- 🎬 10.05 a.m. : Convocation declared open  
by the Chairman, Board of Governors
- 🎬 10.06 a.m. : Welcome address and presentation of report  
by the Director
- 🎬 10.36 a.m. : Award of Degrees
- 🎬 11.35 a.m. : Presentation of Medals
- 🎬 11.45 a.m. : Taking of pledge by the degree recipients
- 🎬 11.50 a.m. : Address by the Chairman, Board of Governors
- 🎬 12.05 p.m. : Convocation address by the Chief Guest
- 🎬 12.35 p.m. : Convocation declared closed  
by the Chairman, Board of Governors
- 🎬 12.36 p.m. : National Anthem  
(All present may kindly rise)
- 🎬 12.37 p.m. : Academic Procession leaves  
(All present may kindly rise)

**Venue : NCC Ground, NIT Rourkela**





## *The Chief Guest*

### **Dr. Vijay Kumar Saraswat**

**Scientific Adviser to Raksha Mantri**

**Director General, DRDO and Secretary Defence, R&D, Govt. of India**

Distinguished Missile Scientist of the country, Padmashree Vijay Kumar Saraswat obtained his Bachelor's degree in Mechanical Engineering from Jiwaji University, Gwalior, Master's degree in Mechanical Engineering from Indian Institute of Science, Bangalore and doctorate in Propulsion Engineering from Osmania University, Hyderabad. He has specialized in missile technologies, rocket propulsion and technology management. Dr Saraswat started his career in DRDO at DRDL (Defence Research and Development Laboratory) in July 1972, with the development of India's first Liquid Propulsion Engine, Devil. As Project Director, he steered the design, development, production and induction of the first indigenous surface-to-surface missile system Prithvi-I of 150 km range and Prithvi-II of 250 km range, into the Armed Forces. As Director, Research Centre Imarat, Hyderabad, Dr Saraswat conceptualized and established facilities for building technologies to calibrate navigation systems for missile guidance and control and for development of micro and nano sensors for future avionics. He has been the architect for integration of Strategic systems and delivery systems. He embarked on a challenging, futuristic Air Defence Programme while serving as Programme Director 'AD' (Air Defence). Dr. Saraswat is a pioneer in the development of a number of critical missile technologies, thus making India self-reliant in Missile Technologies. Dr Saraswat is a fellow of National Academy of Engineering, Aeronautical Society of India, Astronautical Society of India, and Institution of Engineers. For his outstanding contributions to the nation, Dr Saraswat has been conferred Padmashree by the Government of India in 1998. He is the recipient of many prestigious national level awards including Prof Jai Krishna Memorial Award of Indian National Academy of Engineering (INAE)-2009 and Outstanding Indian Award from One India One People in 2006 and of almost all the top-level awards of DRDO. As a professional recognition, he has been awarded Doctor of Science in Science & Technology by Sardar Vallabhbhai National Institute of Technology, Surat. Very recently, he has been selected for the Astronautical Society of India (ASI)'s prestigious Aryabhata Award for 2011 in recognition of his outstanding contributions and lifetime achievements.





## *Chairman, Board of Governors*

### **Shri B. S. Sudhir Chandra**

Director (Project & Planning), Functional Director  
Bangalore Metro Rail Corporation Ltd , Bangalore

Shri B. S. Sudhir Chandra, Director (Project & Planning), Bangalore Metro Rail Corporation Ltd, Bangalore (Karnataka), obtained his Bachelor's Degree in Civil Engineering (first batch) and Master's in Structural Engineering from IIT, Madras and was awarded the President's Gold Medal in 1964. He joined the Indian Railways Service of Engineers in November 1965 and has grown from being a probationary officer to Member, Railway Board. During his career, he held various positions in the Railways, the prominent ones being Divisional Railway Manager, Chief Track Engineer, Chief Administrative Officer (Construction) and General Manager of Central Railway. He superannuated in August 2003, after 38 years of service. His forte has been survey and construction of new railway lines, double lines, gauge conversions, mass rapid transit line at Chennai, etc., involving construction of bridges/viaducts on pile/well foundations, prestressed concrete/steel girders superstructure, tunnels, industrial workshops and sheds etc. As CAO(C), Bangalore, he commissioned about 700 kms of double lines and gauge conversions in the states of Karnataka, Tamil Nadu and Kerala in a span of 3 years. He has visited Japan, Germany and USA for training and inspection of Railway track equipments. He was deputed to Zambia Railways for 5 years. Besides being a Life Member/Life Fellow of many Indian Technical and other Institutions, he was conferred 'Fellow of National Academy of Engineering' (FNAE) in 2004 in the prestigious Institution of 'Indian National Academy of Engineering'. Further he has been a 'Fellow of the Institution of Engineers' and a 'Fellow of The Indian Institution of Bridge Engineers'.



## *Director's Report*

*Honourable Chief Guest, Dr. V. K. Saraswat, Scientific Advisor to the Raksha Mantri, Secretary, Defence R&D and Director General, DRDO, Shri. B.S. Sudhir Chandra, Chairman Board of Governors, members of Board of Governors, members of the Senate, deans, heads of the departments and centres, faculty colleagues and staff of this institute, distinguished guests, recipients of degrees and awards, nominees of electronic and print media, students, ladies and gentlemen,*

On behalf of the Senate, National Institute of Technology, Rourkela, and on my own behalf, I consider it a special privilege and honour to extend to you all the most cordial welcome to the Tenth Convocation of our Institute. Two very special personalities are among us to share the pleasure of this unique event. Ladies and Gentlemen, before I present the highlights of the Institute activities during the past one year, let me have the honour of introducing them to you.

The most distinguished personality among us is our Chief Guest, Dr. Vijay Kumar Saraswat, the Scientific Advisor to Raksha Mantri, Director General Defence R&D Organisation and Secretary, Defence R&D, Government of India. The most distinguished missile scientist of the country, Padmashree **Vijay Kumar Saraswat** obtained his Bachelor's degree in Mechanical Engineering from Jiwaji University, Gwalior, Master's degree in Mechanical Engineering from Indian Institute of Science, Bangalore and doctorate in Propulsion Engineering from Osmania University, Hyderabad, specializing in missile technologies, rocket propulsion and technology management. Dr Saraswat started his research career at DRDL (Defence Research and Development Laboratory) Hyderabad in 1972, with the development of India's first Liquid Propulsion Engine Devil. As Project Director, he steered the design, development, production and induction of the first indigenous surface-to-surface missile system Prithvi-I of 150 km range and Prithvi-II of 250 km range into the Armed forces. As Director, Research Centre Imarat, Hyderabad, Dr Saraswat conceptualized and established facilities for building technologies to calibrate navigation systems for missile guidance and control and for development of micro and nano sensors for future avionics. He has been the architect for integration of strategic and delivery systems. Dr. Saraswat also embarked on a challenging, futuristic Air Defence Programme while serving as Programme Director 'AD' (Air Defence).

Dr. Saraswat is a pioneer in the development of a number of missile technologies thus making India self-reliant in this critical area. He is a fellow of the National Academy of Engineering, Aeronautical Society of India, Astronautical Society of India, and Institution of Engineers. For his outstanding contribution to the nation, he is the recipient of many prestigious national level awards including Prof Jai Krishna Memorial Award of Indian National Academy of Engineering (INAE)-2009, Outstanding Indian award from One India One People in 2006 and of almost all the top-level awards of DRDO. Recently, he has been awarded the Astronautical Society of India (ASI)'s prestigious Aryabhata Award for 2011 in recognition of his outstanding contribution and lifetime achievement.

Dr. Saraswat was conferred the Padmashree by the Government of India back in 1998. I am sure, very soon our nation will record our appreciation of his exemplary leadership with many more prestigious awards.

We also extend an equally warm welcome to Shri B. S. Sudhir Chandra, the esteemed Chairman of the Board of Governors and Chairman of today's function to the Tenth Convocation of NIT Rourkela. Shri Sudhir Chandra, one of the most distinguished Civil engineers that our country has produced, is serving as the Director (Planning and Projects) of Bangalore Metro Rail Corporation. An alumnus of IIT Madras, he joined the Indian Railway Service in November 1965 and rose to be a member of the Railway Board. During his illustrious career in the Indian Railways, he held various responsible positions, the prominent ones being Divisional Railway Manager, Chief Track Engineer, Chief Administrative Officer (Construction) and General Manager of Central Railways. He superannuated in August 2003 after 38 years of exemplary service. He is an acknowledged expert on almost all aspects of rail road construction such as survey and construction of new railway lines, doubling of tracks, gauge conversion, mass rapid transit lines involving construction of bridges and viaducts on pile and well foundations, pre-stressed concrete and steel girder superstructure, tunnels, industrial workshops and sheds etc. As the CAO(C), Bangalore, he commissioned about 700 km of double lines and gauge conversion in the states of Karnataka, Tamil Nadu and Kerala in a span of 3 years. He was also instrumental in setting up the Zambian Railways over a period of 5 years. Besides being a Life Member and Life Fellow of many Indian technical institutions, he has been conferred the prestigious Fellowship of National Academy of Engineering (FNAE) in 2004, Fellowship of the Institution of Engineers and Fellowship of the Indian Institution of Bridge Engineers. Sir, your association with our Institute has been firmly established and we are ever grateful to you for your continuous guidance and advice.

Ladies and gentlemen, I am sure the presence of these two eminent dignitaries among us will inspire our young graduates to work hard to take the Institute and the country to new heights. Before I present the highlights of our activities during the past one year, let me present to you a few thoughts that have been the guiding principles on our path of leading this Institute to International standards. The world is changing rapidly and so are we. In the national scenario, education, particularly technical and engineering education, holds high significance in fulfilling our dream of creating a prosperous, fair and egalitarian society. Our country has been constantly striving to improve its education system. Science and technology, teaching and research, innovation and development are tools to transform our country from a newly independent impoverished nation to a technological power house. The Central Government has been constantly strengthening the country's educational policies. At NIT Rourkela, our effort has always been to be a visible part of this nation building process. In this direction, our Vision has been "to become an internationally acclaimed institution of higher learning that will serve as a source of knowledge and expertise for the society and be a preferred destination for undergraduate and graduate studies." And our Mission is "to advance and spread knowledge in the areas of science and technology leading to creation of wealth and welfare of humanity." Our vision and mission have been supported by well articulated guiding principles laying emphasis on affirmative action towards achieving an all-India character of faculty, staff and student population, a simple and organized personnel structure, and a transparent and decentralized administration. Now, ladies and gentlemen, let me present a brief report on our activities over the past one year that has contributed to the growth of our nation in a holistic manner.

The academic programme of NIT Rourkela has always been modern and innovative. Apart from usual theory and laboratory courses, our curricula contain R & D projects, courses on product development and a mandatory course on "Seminar and Technical Writing". This year the course on Seminar and Technical Writing has taken a new shape. Its delivery has become totally on line, the students presenting a term paper, a technical poster and a patent search in addition to reports on seminars they attend. Every student of NIT Rourkela, whether from a highly technical field of Mining or Mechanical Engineering or from Biology or Humanities, is exposed to the concepts of intellectual property and technical innovation. We believe, these leaders of tomorrow will perform better in their work places in terms of bringing in technical innovation and creating wealth for the society.

## NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA

Two years ago, we introduced two Master's level programmes, in Business Administration and in Development Studies. The graduates of the first batch of these two programmes are receiving their degrees today. I am happy to inform this gathering that most of them have been placed in leading industries of our country. This year we have added five new M. Tech. programmes: Cryogenics and Vacuum Technology in the Department of Mechanical Engineering, Steel Technology in the Department of Metallurgical and Materials Engineering, Communication and Networks and Signal and Image Processing in the Department of Electronics and Communication Engineering, Power Electronics and Devices and Industrial Electronics in the Department of Electrical Engineering, and Industrial Ceramics in the Department of Ceramic Engineering. All our postgraduate programmes, including the new M.Tech. courses have been very well subscribed indicating that the programmes meet the aspirations of the new generation of students. Another significant milestone is the introduction of Post-Doctoral Fellowships in various departments of our Institute, where young researchers after receiving doctorates from other universities and institutes have come to NIT Rourkela for carrying out research independently and preparing themselves for careers in industry or academia. The presence of these qualified and highly motivated young people is expected to significantly boost research output of our Institute.

Streamlining of academic administration has always been a hall mark of NIT Rourkela. Participating in the teaching-learning process has been more important than mere performance in examinations. The Institute has introduced biometric attendance recording for postgraduate and research students bringing in convenience to the students, enhanced research output and convenience of scholarship management. This year the Institute has completed the Undergraduate book of Curricula & Syllabi and has distributed copies among all the students. Two volumes of the same for postgraduate courses are in press.

Ladies and gentlemen, I proudly mention that in this Convocation, we are conferring the much-valued degrees of NIT Rourkela on 452 B.Tech., 130 M.Sc., 8 MA, 20 MBA, 289 M.Tech., 31 M.Tech. (Research) and 30 Ph.D. students. For the records, we may note that after being declared an Institute of national Importance in 2007, NIT Rourkela has produced 3639 Engineers and 110 Ph.Ds. The numbers indicate a milestone in the growth of this institute.

The contribution of our graduates to the society remains our strength. The most pleasing experience is that we are being recognized by the country's intelligentsia for contribution to

the society. The World Education Congress recognized us with an award for Outstanding Contribution to Education in the year 2012. Further, ABP, formerly known as Star News, has awarded us with The “Best Engineering College of 2012” and “Outstanding Engineering Institute of East Zone” awards for the year 2012. While we take such honours as recognition of our work, we relentlessly strive to take our Institute to new heights without a trace of complacency.

The enhanced presence of international students from both SAARC and non-SAARC countries in our campus through exchange programmes administered by DASA, ICCR and MEA have given the Institute an international environment. In addition to student exchange, the Institute has entered into bilateral and multilateral agreements with universities abroad for research collaboration. Prominent among them are the MoUs signed with University of Cape Town, South Africa, University of South Carolina and San Diego State University, USA. The Erasmus Mundus Foundation of the European Union has sanctioned a multi-Institute cooperation project supporting sizable student exchange between European and Indian institutes including NIT Rourkela. This year, our institute has introduced international travel grants for doctoral students presenting papers in overseas conferences. This has resulted in substantial academic benefit to our research teams and in confidence of young researchers.

The Biju Patnaik Central Library has always been a pioneer in technical documentation and information management. At present BPCL boasts more than 63,000 books and 17,000 back volumes of periodicals. We have access to 80 print journals, 20 full text databases, 5 abstract databases and 3069 periodicals. During the current academic year we have added 1640 titles to the library. D-Space, the Institutional Information Repository, now has a collection of more than 1700 journal papers and conference publications.

The library has been conducting an annual book fair since 2009 and this year is no exception. Such fairs have helped in exposing our faculty and students to the latest publications around the World and have made easier the process of acquiring books for the library as well as individual collections. A unique feature of NIT’s academic programme is the practice of book purchase by the students. The Book Fair enhances their exposure and helps them choose the best books from across the globe. The BPCL has created a new text book unit this year to further support undergraduate and postgraduate programmes. During the coming two years, we propose to expand this unit to cover all courses being offered in the Institute.

Along with academic excellence, NIT Rourkela promotes extra-curricular activities by students to ensure all round development of personality. The Student Activity Centre (SAC) provides the venue and organization to carry out such co-curricular and extracurricular activities. The Technical Society of Student Activity Centre has conducted the Annual Techno Management Festival, INNOVISION 2012 during November 2012. The festival witnessed massive participation from institutes across the country in various events. The NITR student chapter of the Society of Automotive Engineers (SAE), Cyborg, Udaan, E-Cell and Maths Clubs were active during the year. A Formula car designed by the students of the SAE won laurels at SUPRA- SAE 2012, the racing event held at the Buddh International circuit, Noida in October 2012. The all-terrain vehicle Black Mamba developed by NIT students is continuously being upgraded. Students of the Department of Mechanical Engineering have added a solar-energy driven electric car to this repository. It has been my personal privilege to drive this car around the campus and I will only be too happy to share this pleasure with pride with our distinguished guests in this convocation.

Every year, the Literary and Cultural Society organizes the spring festival (NITRUTSAV) in the month of February. NITRUTSAV – 2012 was bigger and better than all previous years. Under the guidance of Shri Nalini Nihar Nayak, our new SAS Officer, the students are spending more time in practicing performing and fine arts, the paintings on the walls of the SAC building providing the evidence. Greater emphasis is being laid on the Indian heritage and classical art forms. Last week our students had the privilege of hosting the legendary Kiran Seth, who, by conceiving the student movement SPIC-MACAY over three decades ago, has made Indian Classical art forms available to students across this country in a scale beyond imagination. NIT has proposed to serve as a nodal centre of the unique national movement. The Film and Music Society conducts the CELEBRITY NITE at Dillip Tirkey Stadium. In 2012, the campus had the privilege of listening to Sri Niraj Sridhar and his team. The Games and Sports Society organized the 51st Inter NIT athletic meet in December 2012. The electronic newsletter Monday Morning continues to deliver the latest news of the Institute to every desktop on campus and beyond at the beginning of the week. It has now a new look, more attractive and more convenient.

Research in basic and applied sciences and technology continued to grow, faster than ever before. Faculty of our Institute carried out 52 consultancy projects and 112 sponsored projects, the total value standing at 8.8 crore and 24.77 crore respectively. In the calendar year 2012, the Institute received sanction of 44 sponsored projects with a total value of

over 8 crore and 31 consultancy projects of value 1.91 crore. Three projects worth 2.12 crore based on refractory materials have been sanctioned by DST to Department of Ceramic Engineering. DST-FIST also approved projects worth 3.13 crore to Departments of Mechanical, Chemical and Electronics & Communication Engineering. In addition, Coal (S&T) has approved a project worth Rs. 51 lakhs to the Department of Mining Engineering. Three projects from CSIR, 10 from DST, 5 from ICSSR, 2 from DBT, 13 from SERB, 3 from DRDO, 2 from DAE and one project each from DEIT, ISRO, BRNS, NRRDA, BRFST and AMDISA(SAARC) have been sanctioned to various Engineering and Science departments during the calendar year 2012. In short, SRICCE of our Institute has not only generated revenue worth 1.43 crore as overheads, it has significantly contributed to creation of value-added intellectual and movable capital. The time is not far where NIT Rourkela can boast of attracting research and consultancy projects exceeding Rs.100 crore per year.

Continuing education continues to be an important outreach activity of NIT Rourkela. Over the past one year, the Institute has conducted 18 short term courses serving both the academic fraternity and industry at large. Besides, the departments have organized ten national and international conferences, inviting a significant 1356 participants from across the globe.

An institution of higher learning needs superior scientific infrastructure for research. The Bio-medical and Biotechnology department procured a precision Mechanical Tester from Instron of UK for testing light biological and polymeric materials. The Life Science Department added many new equipment like high speed refrigerated centrifuge, mutation detection system, fluorescence microscope, inverted microscope etc to its well equipped laboratories. The department has also set up a special laboratory for Cell and Developmental Biology. The Liquid Nitrogen facility in the Department of Mechanical Engineering has started full operation providing cryogenic facility to all departments. The Department has also started two new laboratories – the Laser Processing Lab. and the Heat Transfer Lab. by setting a series of small but appropriate equipment. The vacuum furnace with hot press facility was made operational. A Gas testing facility was created in the Mining engineering department and this has been approved as a gas testing examination centre by the Director General of Mines Safety, Dhanbad.

A large computing and communication infrastructure is the backbone of a modern university. Our Institute campus has nearly five thousand computers of varying configurations and

capacities, all networked over a widely dispersed Ethernet network laid over 10Gbps fibre optic back bone. Every year the Centre adds new computing facilities such as Desktop Computers for Research Students and new software whilst upgrading computer labs and improving computing performance and storage. This year, a High Performance Computing system consisting of 32 Computing nodes with Intel Sandybridge processors and more than two Tera Flops processing power has been set up. It also contains a Graphics Processing Unit consisting of 512 cores to speed up the display system. A new storage system HP-P6500EVA consisting of 100TB of data storage capacity has been purchased. E-mailing is an important service for all users of any institute of higher learning. Our Institute has procured world renowned Zimbra mailing software. The software will serve nearly 6000 users in the campus. Solidworks, a 3D-CAD software from Dassault Systèmes with a 500 users network based license has been added to the institute software resources. This software will be used for engineering design and drawing courses. Considering greater demand for internet access due to enhanced student strength, a new UTM has been added to the network infrastructure.

I take pride in saying that our Training and Placement Centre has untiringly coordinated with several industries and academic institutions to provide quality placement to our graduates, postgraduates and doctorates both inside the country and abroad. During the academic session 2011-2012, 87 reputed companies visited our Institute for campus placement and offered more than 743 jobs to our students. The current academic session 2012-13 has already seen 49 companies recruiting students of our Institute through campus placement. More than 400 jobs have been offered. The Major PSUs who participated in our campus recruitment programme during 2011-12 include IOCL, Coal India Limited, NMDC and NTPC. The other recruiters include software majors Microsoft, Oracle, Samsung, Sony, SAP Lab, and Amdocs and core companies such as Tata Steel, Vedanta, Essar, Hindalco, and automobile manufacturers such as Ashok Leyland, Tata Motors, Maruti-Suzuki, Mahindra & Mahindra, Hero Motor Corporation and Bajaj Auto. The highlight of the last academic year's placement was the Australian Mining major Rio Tinto recruiting two of our students with compensation of international standard. The Training and Placement Centre of our Institute, also arranges internship programs for our students in reputed organizations within and outside the country. During 2011-12, our pre-final year B.Tech students were placed in 149 organisations and MBA students were placed in 12 industries. Nineteen of these students were also sponsored to international universities abroad for a 2-month summer internship programme. A regular feature of our training programme for undergraduate students also includes short study

tours to nearby industries and other relevant organisations. This helps the students to get a feel of the industry and their practices, and enriches our curriculum. Thirty such industrial tours have been conducted so far in this academic year.

The supporting staff has always been a prime strength of the Institute. In recent years our Institute has taken special initiative to promote welfare of the technical and ministerial staff and improve their competence. Among the major steps taken in that direction are rationalization of staff structure, promotion of technical excellence, training of ministerial staff and enhancement of living standards. I am proud to mention here that among all NITs, our Institute was the first to rationalize the staff designations, qualifications and pay scales. It has created a sense of pride among our staff, which has led to increased productivity and stronger participation in the growth process. Today, the world outside looks up to the NIT technicians, clerks or officers with the same respect it offers to NIT faculty and students. The Institute has also organized several other staff development programmes, the notable among them being the training programmes on NIT Act, communication and motivation skills, purchase and works procedure and on managing time and change. We have continuously strived to encourage our staff to maintain transparency and honesty at the work place and to be smart workers too.

The Institute Health Centre has been given new personnel and a renovated building. The floor space has been doubled; the quality of space is excellent. Two brilliant young full time doctors have been appointed and to support them we have inducted part time specialists from among the most reputed physicians of the city. The campus school has been given additional building space, playground and a new look. The Staff Club now has a new building with well lit and ventilated rooms and outdoor sports facility. The management system being introduced is highly participatory and involves family members at par with the employees. The Children of our faculty and staff constitute a part of the future of the nation. The Institute has created a modern Children's park to ensure all round growth of the valuable resource.

Due to the concerted efforts taken over the past few years, the NIT campus now looks beautiful with luxurious lawns, well laid out gardens with seasonal flowers and huge trees all adding to a green and pleasing look. This has been possible due to the sincere efforts put in by the entire campus community. This pristine and scenic environment provides the right frame of mind for developing the most desirable academic and social personality. The NIT campus is a mini township with modern amenities. A new water supply system is under

construction to cater to the increased demand from students and staff of the Institute. We are grateful to the Government of Odisha for agreeing to set up a new 300 mm pipeline from Koel river along with intake well and pumping station delivering 5 million litres of raw water per day. The Institute is building the filtration plant. The complete system is expected to be operational before summer of 2014. To meet the greater demand of electricity by academic and residential consumers, a new 33 kV circular ring mains system is under construction. Overhead lines have given way to underground cables in the campus, for high tension and low tension lines. The state electricity authorities have been approached for improving the quality of power supply. Construction of a dedicated hotline from the 132 kV state grid at Chhend to NIT campus is under way. Two generators of 500 kVA (one in the institute area and another in the hostel area) have been installed to ensure uninterrupted power to most activities of the institute. Lifts have been procured for installation in the academic buildings for ease of movement of the differently abled. The old lift that has harassed us for half a decade is being renovated. Work on the Central Air-conditioning System is making progress in all fronts – chiller plant, pipelines and ducting in the user space.

In the year under review the institute took up massive construction work with the target of creating world class infrastructure for its faculty and students. A large lecture hall complex, the first of a series of two units has now been commissioned. The twin building for Electrical Sciences has just been inaugurated by our Chief Guest today. Considering the importance of Electrical Engineering, Instrumentation, Electronics and Communication to our defence preparedness, it is only appropriate that the Electrical Sciences buildings shall prominently bear the name of the most well known defence scientist of our country. Our Electronics and Communication Engineering Department has already adopted “Defence Electronics” as its primary research focus area. The buildings of Chemical, Mining and Ceramic departments are also being renovated and substantially expanded. Work has been initiated towards expansion of the Computer Science building, Metallurgical and Materials Engineering Department and a brand new “Data Centre” for the central computing facility. The construction of the TIIR (Technology Innovation and Industry Relations) Centre, the corporate link of the campus is progressing well.

Hostel buildings have been renovated and expanded to keep pace with ever increasing student strength. The 1000 seater Vikram Sarabhai Hall and the expanded C. V. Raman Halls are already handed over to the students. The Prof. K. R. Patel Cafeteria, serving M. Visvesvaraya and G. D. Birla Halls, is in full operation. A Cafeteria serving students of Dhirubhai Ambani and

M. S. Swaminathan Halls is expected to be delivered shortly. Work is in progress towards expansion of the Kiran Mazumdar Shaw Hall for girls and the S. S. Bhatnagar Hall for married students. Eighty four new residential quarters for faculty have been added to the campus, and 64 more are under design. The road structure has been expanded considerably in both volume and quality.

A new and ambitious phase of construction has been initiated to cope with the increased student strength and enhanced expectation. The proposed new buildings for which the final work order is expected to be issued within the next week will cover a new building for Mechanical Engineering and Industrial Design departments, the 1000 seater Satish Dhavan Hall, a faculty housing bloc and an iconic Golden Jubilee building. The institute shall certainly graduate to the big league once the new facilities are added and properly utilised. The selection of architects for the next phase of construction activity including renovation of Main Building, Civil Engineering Department and a Laboratory Complex has been taken up. The construction of a 1600-seater auditorium is being planned for all academic and cultural gatherings including convocation and conferences.

Harassment by interest groups and lack of proper communication with the city has always remained a headache for the residents and visitors to the NIT campus. I am happy to share with this audience that with support of the Government of Odisha and goodwill of the residents of Rourkela, we have been successful in completing our 7 km boundary wall. The State Government has also taken up a project to widen and improve the road connecting our campus to the city of Rourkela.

Electronic communication for voice and data is a major part of modern living. The Institute's ICT infrastructure has been considerably expanded during the past one year. A new IP based EPABX of 10,000 line capacity has been installed in our telephone Exchange, with 400 IP telephone connections in the academic area. New residential Quarters have also been connected with IP telephones. The telephone network has been extended to all the quarters in the residential area irrespective of the size and status. These facilities have furthered the growth of our Institute and we hope to have an ultimate state-of-art infrastructure of international standing by 2020.

Alumni of NIT Rourkela have excelled in almost every walk of life – industry, academia, research, social and public life. The Institute appreciates the glory they have brought to their

alma mater. The Centre for Alumni Relations has instituted Mrs Shanta Jain prize for the Best Product oriented Project by an NITian with contribution from Shri Pramod Kumar Jain, a 1974 batch alumnus in Mechanical Engineering. This prize will be awarded for the first time in this Convocation. Alumni from across the globe are coming forward to support the Institute and we record our appreciation for this wonderful gesture.

The Institute has set up an official alumni network not only to provide a forum for the alumni to share nostalgic moments with their class mates and hall mates, but also to help each other at the time of need and to guide the next generation of students. Every student who ever graduated or shall ever graduate with any degree in any discipline is automatically a member of this network. I call upon all alumni including those who will receive their degrees in this convocation to work for the alumni network, for fellow alumni and for welfare of current and future students.

Our beloved institute has been bestowing "Distinguished Alumnus Award" on alumni who have made their alma mater proud by their professional and social achievements. This year three unique individuals have lent their name to the 10<sup>th</sup> Convocation, for which I record my personal appreciation. Prof. D. K. Tripathy, my long time personal friend and Shri Sandip Das have truly distinguished professional careers in academia and industry. Our young graduates are certainly inspired by the professional dedication of these two pioneers. My singular note of gratitude goes to the young recipient Sri Madhusudan Padhi, whose personal efforts as a responsible Government Official restored to NIT the land that the Government of Odisha under the legendary Biju Pattnaik, our first BOG Chairman, allocated to REC and that we almost lost to unauthorised occupants. Sri Padhi's efforts have given a hope that someday NIT Rourkela will be counted among the best institutes of the world. What makes me even more proud is that Sri Padhi was not doing a favour to his alma mater; he was only sincerely discharging his duties as a Government servant, the sincerity reflecting the superior education he received from his teachers and mentors at REC Rourkela.

The Convocation is a special event in the academic calendar of any Institute, more so in the life of its graduating students who are, without doubt, its leading lights. I extend my heartiest congratulations to all of them, with a special word of felicitation to those who have received awards and medals. I feel honored to announce the names of the students who, as recipients of Gold Medals for their academic excellence, have made their alma mater really proud of them. I personally congratulate the four Institute Gold Medal winners: Miss Tithy Sahu of the

Department of Computer Science and Engineering, the Best Graduate of the year, Miss Bijily B of the Department of Civil Engineering, the Best Post Graduate, Shri Animesh Kumar Srivastava of the School of Management for MBA and Shri Chandan Kanta Das of the Life Science Department for being the best among M.Sc and MA students. I also congratulate Shri Bikash Mohanty, a graduate of the Department of Mechanical Engineering, who has been conferred the coveted Professor Bhubaneswar Behera Gold Medal for the Best All-rounder of the 2012 undergraduate batch. I am particularly proud of Miss Swetalina Panigrahi a graduate of Electronics and Instrumentation Engineering, who has been conferred the Institute Gold Medal for the Best B.Tech Project of 2012.

However, the attainment of this coveted degree also puts on your young shoulders the burden of not only extending a helping hand to those in need, but also of carrying out your professional duties with the greatest standards of honesty, sincerity and integrity. We are all looking forward with great hope to see the achievements being made by our students in future. As Mahatma Gandhi once said: "You must be the change you wish to see in the world."

I extend my congratulations to the proud parents who will remember this day with as much pleasure, if not more so, as their graduating children. I would also like to share this moment of joy and pride with the parents who could not make it here and are awaiting a phone call from their worthy children. I would like to say here that your child is an exceptional person who has proven his or her worth by earning a degree from this esteemed institution. This degree opens up for him or her a plethora of avenues in a wide variety of fields. There are opportunities as well-paying jobs in industry, research, academia or Government; there are opportunities for self-employment and entrepreneurship. The prospects are many and the future certainly bright.

Our students are entering the job market at a time when our country is in an economic downturn. The competition is tougher and the job market is shrinking. Not only the future, even the present has become challenging. There is, of course, one principal rule – "there is no alternative to hard work". In this age of competition, you need to continuously learn new skills to be successful in your professional career. Achievement and output require hard work and total commitment. In life, there may be many ups and downs, but I am confident that your education at NIT Rourkela has given you the capacity and the perseverance to stand up to any situation and to do your bit in creating a new India. Whatever you do in the future,

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whichever vocation you choose, I have no doubt that you will look back to the years you spent in this institution with nostalgia and fond memories of academic and extra academic activities and life in the hostels. I am certain that no matter where you go, you will carry the mark of excellence that NIT Rourkela has bestowed into you. Through the coveted NIT certificate, I charge every recipient of the degree with the responsibility of spreading the religion of technology in an effort to make its fruits available to the poorest of the poor so that he or she shall no longer stay poor.

I close my speech with a quote from the famous American poet Ralph Waldo Emerson: "Do not go where the path may lead, go instead where there is no path and leave a trail."

*JAI HIND*

Rourkela  
19 January 2013

**Prof. Sunil Kumar Sarangi**  
Director



## *Chairman's Address*

### **SHRI B. S. SUDHIR CHANDRA**

**Chairman, Board of Governors (BOG)**

- *Vijay Kumar Saraswat ji, Director General of the Defence Research and Development Organization, Secretary of Defence Research and Development and the Chief Scientific Advisor to the Minister of Defence and Chief Guest of today's function.*
- *Distinguished members of the Board of Governors*
- *Esteemed members of the Senate, Director and Registrar,*
- *Esteemed Faculty, Staff members and Distinguished Guests,*
- *Dear graduating students, ladies, gentlemen, media and friends.*

Today is an auspicious day for all of us present here and a red letter day in the lives of graduating students.

It is my proud privilege today to address this august gathering at the 10<sup>th</sup> Convocation of the National Institute of Technology, Rourkela. This Institute over the years has grown from strength to strength and has become a Centre of Excellence imparting quality education in Engineering and Technology. I would like in particular to express my deep appreciation and gratitude to its distinguished Director Prof. Sunil Kumar Sarangi and his team for their determined efforts at making this an institute of international repute. I would also like to congratulate all members of the faculty and other supporting staff for their role in ensuring sustained level of accomplishment down the years.

NIT, Rourkela is an autonomous Academic Institute, created by an Act of Parliament to impart quality education in technology and science at international standards. It is administered by a Board of Governors (BOG) nominated by the President of India, who is the Visitor of the Institute. The director is the Executive Head of the Institution. The Senate comprises of

## NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA

all the Professors of the Institute and a few members nominated by the Chairman, BOG. It is responsible for the maintenance of standards of instruction, education and examination and all other academic matters. Other relevant administrative roles are performed by the Registrar, the Deans, Heads of the Departments and Centres, Chief Warden, Wardens and members of the faculty.

NIT, Rourkela has a diversified academic programme with 17 academic departments offering specialized courses at undergraduate, postgraduate and doctoral levels. Admission to the Institute is mostly through National Level Competitive Examinations like the All India Engineering Entrance Examination (AIEEE) for the undergraduate programmes, the Graduate Aptitude Test in Engineering (GATE) for postgraduate programmes and Special tests conducted by the Institute for its research programmes.

Today, NIT, Rourkela is highly acclaimed, one of the most prestigious Institutions with a reputation for excellence in research, consultancy and education at undergraduate, postgraduate and doctoral levels. It is passionately committed to making our country a world leader in technology and science and in inculcating this commitment among all its students. Our aim is to be known around the world for our academic standards and to be counted amongst the best technological Institutes of India in terms of innovation, entrepreneurship and creation of intellectual wealth.

In the last two years, NIT, Rourkela has been honored with two Awards, one by STAR-News in the category of outstanding Engineering Institute (Eastern region) and the other for Best Government Engineering Institute continuously in 2011 and 2012. The awards were well researched and chosen by an independent jury and a panel of professionals who believe in nurturing talent and in recognizing the best. The award is in recognition of leadership, development, marketing of an institute and industry interface. This is really a matter of great pride and profound honor for the entire NIT family - Faculty, staff, students and for all others who helped towards achieving this excellence. This is the result of the collective efforts, diligence and team spirit and such recognitions provide us with an opportunity to work harder to crown our Institute with higher glory. Congratulations to all of you.

You would be glad to know that in recent years, the Institute has given added emphasis to post graduate programmes. As a result today, there are more than 500 M.Tech and 500 Ph.D students in the Institute. In this convocation, nearly 30 students are receiving Ph.D

award which is a matter of pride for all of us. At present the number of Ph.D holders among faculty members is more than 96% in our institute which I learn may be the highest among all NITs. The new departments, such as Bio-technology and Medical Engineering (BM), Life Science (LS), Industrial Design (ID), School of Management (SM) etc. have started functioning recently. The total student strength has grown up to 4500 today and is likely to grow to 7000 in the coming three years.

I feel proud and am glad to bring to the notice of this audience that many stalwarts such as Sri N.R Mohanty, Prof. Damodar Acharya, Prof. Lalit Mohan Patnaik, Dr. Surya Mohapatra and many more have passed out of this portal of knowledge and have occupied high positions in India and abroad.

Infrastructure development is being continuously done in the Institute. New academic buildings, widening of roads, swimming pool, playgrounds, and modernization of staff quarters are some of the developmental works that have been undertaken. The aesthetic appeal of the campus has also got a facelift with the newly laid out lawns and gardens and massive plantation drives have also been taken up in the campus premises. A permanent solution to the water and electricity crisis is laying of new pipelines of larger diameter and construction of a new substation. Both these works have been taken up and are under progress. These should mitigate the hardships to the residents of the campus resulting in their higher productivity. Some of the other additional measures which have been taken up with the help of the State Administration are the construction of a two lane approach road from Biju Patnaik Chowk to NIT Campus, acquiring additional land for the second Campus of the Institute, laying a road structure skirting NIT Campus and acquiring 2.5 acres of land at Bhubaneswar for NIT Extension Centre.

Our students are among a few fortunate ones who have access to educational experience at this renowned institution, befittingly designated as an institution of national importance. This experience will reward them throughout their life besides providing them with the key to the storehouse of vast alumni links. The students are already awakened to the realities of intense competition and have acquired the required ability to take advantage of the competitive environment. While they may use this ability to create wealth and welfare for themselves and for the organizations they work for, it is also our bounden duty to strive for the welfare of society, for reducing disparity therein and to empower those who are less privileged. We should not forget the noble values of caring and sharing of service and sacrifice that have kept our society away from dangers of extinction and made it vibrant at all times. As inheritors

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of a society which has blossomed up great values for life and a deep concern for human development and well-being, we should sincerely and intensely aspire towards deepening and broadening our knowledge, learn to experience the power of collective team work, and always be guided by higher values which we believe in. In all that lies ahead of us, may God grant us the courage, the wisdom and the success we deserve and bless us for the fulfillment of our cherished goals.

Thank you



## *Chief Guest's Speech*

### **Dr. Vijay Kumar Saraswat**

**Scientific Adviser to Raksha Mantri**

**Director General, DRDO and Secretary Defence, R&D, Govt. of India**

*Shri B. S. Sudhir Chandra, Chairman, Board of Governors, Professor Sunil Kumar Sarangi, Director, Shri S.K. Upadhyay, Registrar, Members of the Board of Governors and the Senate, Faculty members, invited guests, dear young students, members of the Press, Ladies and Gentlemen:*

I take this opportunity to congratulate all the graduating students for their excellent performance and for achieving the coveted and cherished degrees. I also congratulate the '**Esteemed Teachers, Mentors**' for sharing their invaluable knowledge and for moulding and training the young minds in different disciplines. I consider that you have nurtured and created a new segment of resource for our country and I value this as a great achievement. My special congratulations are also extended to the parents, who would feel proud to see their children graduating from an Institute of repute.

It is indeed a privilege not only for the Institute to hold its 10<sup>th</sup> Annual Convocation, it becomes a milestone for an Institute that has continued its journey from being a College to an Institute of Teaching and Research, and being recognized as an Institute of National Importance and as a Centre of Excellence. This Institute over the years has grown from strength to strength and has become a Centre for imparting quality education in Engineering and Technology. I would like to particularly express my own appreciation to the high level of leadership being given by the Board of Governors led by its dynamic Chairman Shri B. S. Sudhir Chandra, and its distinguished Director Prof. Sunil Kumar Sarangi. I would also like to greet all members of the faculty and other supporting staff of this Institute for their role to ensure sustained level of accomplishment year after year

Today, I would like to share with you some thoughts which have evolved by virtue of my long association with great visionaries of the country and by being part of a dynamic organization which is working for India's technological self-reliance in the field of defence. I would consider these moments with you worthwhile if I could present you the technological

challenges lying ahead of us and thereby inspire you to identify areas of your own strength and interest in the endeavor of making our nation a 'Technology Leader'. Since you are graduating at the time when our nation is surging forward in all fields, now empowered with Knowledge, you have to fortify it with your personal traits with a sense of pride to serve the nation.

### **Re-Engineering: Higher education**

Engineering Colleges are the hub of dynamic and creative young minds and when synergized with learned and experienced faculty should act as seeding and breeding grounds for new innovative ideas and technologies thereby leading to advancement of science and development of home grown technologies. I would appeal to the faculty to lay more emphasis in research on specific goal oriented research topics, which are relevant to national needs. One need not be enamored of undertaking only high-tech research but also take up low tech R&D which is necessary for the Nation for meeting our country's specific needs, instead of just emulating the West. It is the role of the teachers to inculcate a spirit of creative thinking in the students so that they can think innovatively and provide solutions to complex problems. Therefore, we must reform existing institutions of higher learning. In Market driven economy, academic institutions must revise or restructure curricula at least once in three years in order to meet the market demand. Institute must become a hub of research to capture synergies between teaching and research that enrich each other. In order to attain excellence in teaching and research, regular flow of information and exchange of human resource between academic institutions and industries need to be gulfed. Education must make efforts for securing knowledge and mastering modern skills and methods than merely storing and distributing the traditional ones. For this purpose of training of mind and mastering of skills and for harnessing science and technology to profitable and productive processes of economic growth and social well-being, the technological education system has to be continuously reviewed and adopted. Simultaneously, the higher education system must provide accountability to society and create accountability within.

### **Engineering Education: Society and Sustainability**

The development of the modern world has been dominated by science, engineering and technology and the role of the engineer is linked closely to the needs of society. This century will be defined by some of the huge challenges humanity facing now. Among them are energy and food security, competition and scarcity of natural resources, and climate change. India is also facing issues such as global warming, ocean acidification, biodiversity loss, urban

migration, increasing demand for energy, drinking water shortage, clean air, safe waste disposal and fuel efficient transportation. We must agree that the engineering profession has a significant role to play in affecting the future of our nation. The demand for engineering skills is likely to be higher than ever before in order to deliver sustainable engineering systems, low-carbon energy technologies, and robust physical infrastructure to protect against geophysical hazards such as sea-level rise and extreme meteorological events. It is likely that engineers will have to work across the traditional boundaries of sub-disciplines such as electrical, mechanical, civil and process engineering in order to meet these challenges. So, as engineers you can create what has never existed before, through a combination of imagination, ingenuity, and perseverance. You therefore have many opportunities to become engaged in the creative processes like generating ideas and solving problems to meet the needs of the society. I urge upon you that there is an urgent need for transformation of engineering education globally to equip society with professionals who can address our 21<sup>st</sup> century sustainable living challenges. Professional engineers are required to take responsibility for engineering projects and programs in the most far reaching sense including understanding the requirements of clients and that of society as a whole; working to optimize social, environmental and economic outcomes over the life time of the product or program.

Most current engineering degrees in India are still concentrating on conventional engineering methods based on old economy involving linear 'heat, beat and treat' processes ignoring 'waste' at the end of the processes. Today's Engineering has to respond to the needs of society and undoubtedly we need a new breed of engineers who can become real change agents for creating a sustainable model of society. Let us make a positive difference to the future of the society and the health of the planet! Let us have fresh air which we and our children can breathe without fear! Is there not strong enough a case for Higher Education institutions to equip students with appropriate knowledge and skills to meet these challenges? I rather advocate that "all engineers need to be environmentally educated so that they understand the issues involved in sustainable development with greater breadth of knowledge."

The knowledge base is indeed the foundation for leading our country into a developed nation. India has shown its mettle in the process of becoming a technological force with all round growth in various sectors of economy, namely- agriculture, product manufacturing, textiles, transport, communication, and power and services sector. There is considerable advancement in our defence R&D capabilities in terms of high technology products and equipments. Today we are a leading nation in Information Technology and have a strong base in software development. Similarly there have been advancements in aerospace

technologies and their applications for communication systems, courtesy the agile and capable battery of young brigade with never-say-die and 'yes we can' attitude. With this background, India must take the lead in mobilizing and integrating knowledge resources for its transformation into a nation of advanced technologies.

### **Energy Security**

As India continues to develop, it has to focus on accomplishing twin objectives of sustainable development and inclusive growth. In order to achieve these objectives we should focus on clean and efficient technologies. By 2030, India is likely to have GDP of USD 4 trillion and population of 1.5 billion: that will swell the demand for critical resources with a parallel increase in greenhouse emissions. Therefore engineering students have to take up the responsibility for developing affordable technology for energy security. You have to find technical solutions to the problems that modern India is facing. The solutions should be designed keeping in mind the Indian conditions and making them cost effective so that they are within the reach of rural India and urban poor. There are many options to secure clean energy. Solar power is the most promising one and needs greater research; finding technologically efficient and economically viable solutions to harness solar energy is the biggest challenge before the country.

### **Space Security**

Space Security is the basis for responsible use of space. Outer space should be free for exploration and use by all States. While many countries are using space for their benefits, efforts are also initiated for deprivation of the same to other countries. Today the space is widely used for communication, navigation, remote sensing and surveillance. Efforts are also on for exploitation of space resources. In future, as more and more countries start exploiting the space for military operations, availability of orbital space would be a concern and the countries are likely to resort to offensive means to gain space superiority. Major threats to space security are increasing amounts of orbital debris, increasing crowding in some key orbits, and potential use of space weapons that threaten the space environment. Crowded orbits increase possibility of spacecraft collisions. With the increased application of NCW utilizing space assets of communication, Navigation and surveillance, the case for space security is becoming very strong.

The future is likely to see space based strike systems like space based lasers, interceptors and maneuverable satellites. India needs to consider the impact of space conflict on terrestrial

communication, surveillance and intelligence and navigation systems. To counter this, India needs to develop electronic counter measures and develop technologies for space security that include ability to identify and attack ground stations, blinding /dazzling of satellites, developing hit to kill satellite weapons and acquiring capability to attack through micro satellites.

### Cyber Security

With the advent of Computer, Computer based Networks, Internet and application specific software, operating systems, all connected on a grid for economic, commercial, defence, civil aviation, knowledge dispersion, education and strategic activities of the nation, the next age of war is going to be Cyber Warfare. In this the weapons are going to be information denial and information espionage using modern software hackers, worms, viruses, spoofs etc., We as scientists and technologists have to develop Information Security Systems as defensive actions and as cyber-attack weapons to paralyse the enemies' economic and security activities. The cyber security includes surveillance of information domain for information, defending our own networks from the cyber-attacks while also attaining the capability to penetrate into any systems for counter actions. We can visualize the economic and strategic impact of a cyber-attack if the air traffic control system is paralysed, the electricity grid or the communication networks are paralysed.

### Food and Health Security

Most research linking global environmental change and food security focuses solely on agriculture: either the impact of climate change on agricultural production, or the impact of agriculture on the environment, e.g. on land use, greenhouse gas emissions, pollution and/or biodiversity. Important though food production is, many other factors also need to be considered to understand food security.

However, adapting food systems to global environmental change requires highest technological solutions to increase agricultural yields. The first Green Revolution became a reality with the availability of miracle wheat variety, land reforms and electricity provision to the farmers. And the triumvirate of Dr. Swaminathan, Shri. R. Venkatraman and Smt. Indira Gandhi provided the leadership. Food self-sufficiency was a major achievement. Food security refers not only to the availability of food but also a person's access to food. Without new technology and innovative farming methods it will be difficult to provide food security. Only advances in agricultural biotechnology could make possible to produce an abundance of food efficiently

and help keep costs low. With no land to farm anymore and the diminutive trend in agricultural land areas, desire to increase food grain production might remain a wishful thinking. Food self sufficiency of the 90s will be a forgotten achievement and food shortage will loom large. The target of second green revolution is 400 million tons of food grains as compared to about 214 million tons in 2006-07. The proposed time frame of 20 years to affect this revolution can be achieved only if we maintain 5 to 6 % growth rate in agricultural sector for another 15 years.

What is then required to start a much needed "Second Green Revolution", to trigger a higher agricultural growth in India? Science and technology has to play the vital role by focusing on aspects like high productive genetically modified seeds to double the per acreage production, private sector involvement, efficient marketing of ideas to bring awareness to adopt innovative measures, investment in long stalled irrigation projects, linking of rivers to effect the water supply to the locations of deficit and parallel development in the area of dairy farming with proper attention and respect to the ecosystem and the symbiotic existence of man, plant and animal kingdom.

Global environmental changes such as losses of ecosystem services and climate changes might contribute to changes in disease patterns, triggering migration and causing economic losses for vulnerable populations. Therefore, engineering graduates should also focus on developing low cost biomedical instruments which can provide affordable healthcare to our larger population. With this everyone will have access to regular non-invasive screenings to detect disease as early as possible. While healthcare advances so quickly in the developed world, engineers must also address the issues of the developing world. In addition to long-distance communication via telemedicine, a great potential exists to improve diagnosis and therapy and to increase access to appropriate medicine and technologies.

The modern era has seen the application of engineering in almost every branch of medicine, so much so that the practice of medicine is now completely dependent on the work and support of engineers. The introduction of electronic patient records, complex and extremely powerful electro medical equipment and devices, and minimally invasive technologies is just the beginning. The future holds new possibilities of providing telemedicine and e-health services, new ways of home self-care, sophisticated new sensors, and new ways of health care for older persons. The pace of progress is accelerating and tremendous challenges lie ahead for engineers working in this field. There seems to be no limit to what engineering

could do further to revolutionize medical practice. In fact, the next generation of biomedical engineers will probably develop things we can't even yet imagine.

In addition to the above areas there are many technological areas where we should focus so as to attain self-reliance. Due to paucity of time I would limit my discussion to these broad areas.

In all possible fields of knowledge system, there is always a scope for growth and development moreover. Ladies and Gentlemen, we are in a transitional phrase. While we are in the pursuit of bringing technological and scientific independence to the country, your contribution as an Institute of higher learning remains extremely important to make our aim successful. With institute-industry interface, with providing scientific and technological innovations, we can bring in complete technological independence to the country. It highlights, in principle, the role that we are to play for the making of a truly 'liberated' nation where we create new and advanced technology and we are to bring name and fame to this country.

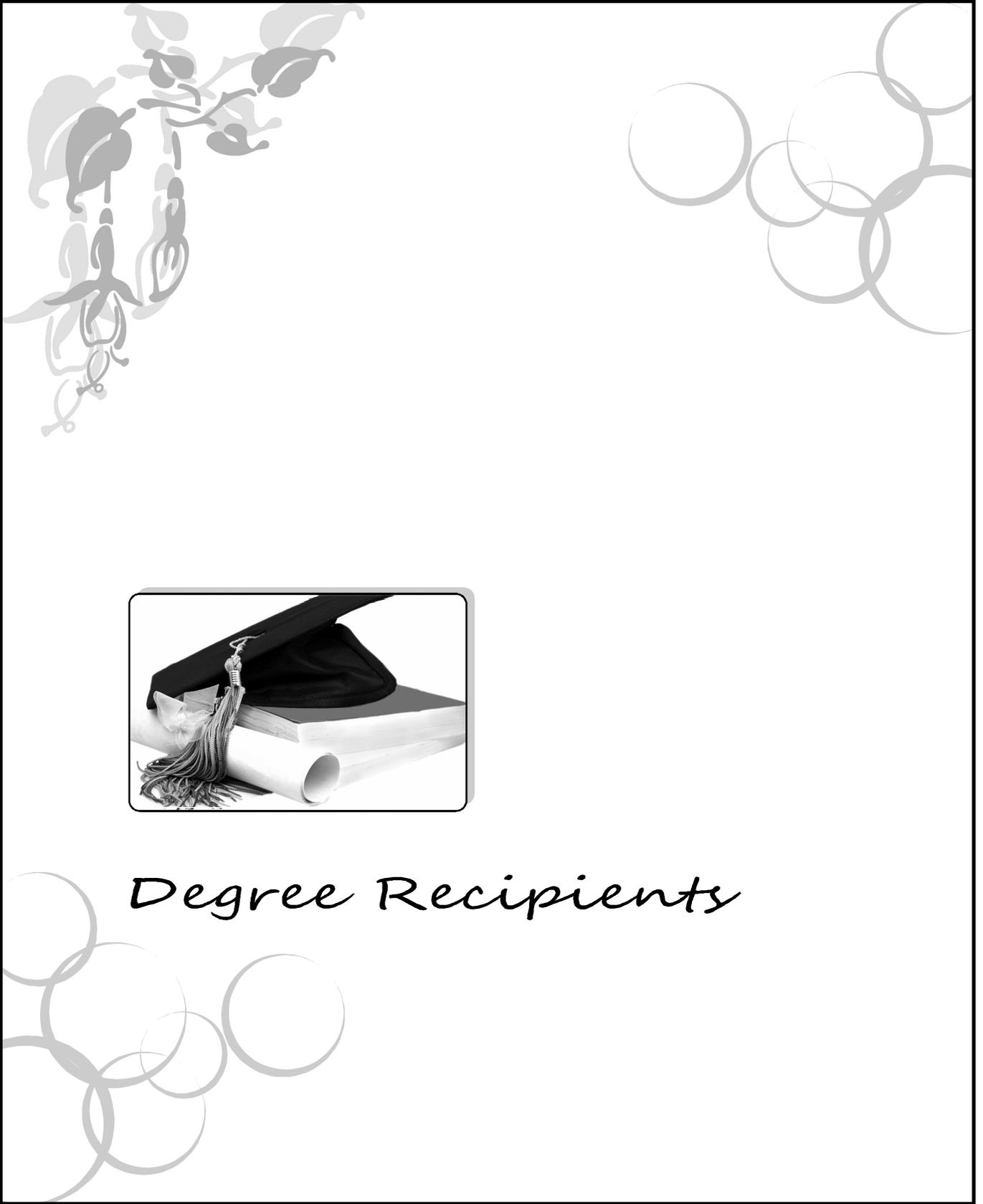
Again on this occasion I extend my best wishes to each one of you for your success and for fulfillment of your visions, dreams, and aspirations in life. May the idea and experience of achievement and accomplishment guide you in your further journey as you leave the portals of the esteemed institution of which you were the most dynamic component till today. Nonetheless, I am aware of the fact that you have the strength, the energy, which is gained through your hard work to meet this challenge. Now is the time, the occasion, for you to bring to bear this strength to protect, preserve not only the proud achievements of our yesteryears but also build the future of this country on a solid foundation.

My heartiest congratulations and best of luck.

Thank you.

**Jai Hind**





*Degree Recipients*

## **DOCTOR OF PHILOSOPHY**

### Department & Candidate's Name

### Title of the Thesis

#### **Ceramic Engineering**

HEMALATA PATRA

Studies on Sr / Co Substituted Barium Ferrite Materials for IT-SOFCs Cathode Applications

#### **Chemical Engineering**

ACHYUT KUMAR PANDA

Studies on Process Optimization for Production of Liquid Fuels from Waste Plastics

NIHAR RANJAN BISWAL

Studies on Adsorption and Wetting Phenomena Associated with Solid Surfaces in Aqueous Synthetic and Natural Surfactant Solutions

NAGESH KUMAR TRIPATHI

Production, Purification and Characterization of Recombinant Viral Proteins

RAMA KRISHNA GOTTIPATI

Preparation and Characterization of Microporous Activated Carbon from Biomass and its Application in the Removal of Chromium (VI) from Aqueous Phase

#### **Civil Engineering**

MANOJ KUMAR RATH

Dynamic Instability of Laminated Composite Curved Panels in Hygrothermal Environment

JAYARAM MOHANTY

Vibration, Buckling and Parametric Resonance Characteristics of Delaminated Composite Plates Subjected to In-Plane Periodic Loading

#### **Computer Science & Engineering**

RATNAKAR DASH

Parameters Estimation for Image Restoration

MITRABINDA RAY

Prioritizing Program Elements: A Pre-Testing Effort to Improve Software Quality

#### **Chemistry**

SONIA

Synthesis and Characterization of Modified Barium Titanate Ferroelectrics by Modified Solid State Reaction and Microwave Sintering Routes

SATISH SAMANTARAY

Physicochemical Characterization and Catalytic Application of Nanocomposite Oxides and Clay Based Nanoporous Materials for Synthesis of Some Biologically Important Molecules

#### **Electronics & Communication Engineering**

RAMESH KULKARNI

Novel Restoration Techniques for Images Corrupted with High Density Impulsive Noise

AJIT KUMAR SAHOO

Development of Radar Pulse Compression Techniques Using Computational Intelligence Tools

TRILOCHAN PANIGRAHI	On the Development of Distributed Estimation Techniques for Wireless Sensor Networks
SUDHANSU KUMAR MISHRA	Robust and Constrained Portfolio Optimization Using Multiobjective Evolutionary Algorithms
P KARUPPANAN	Design and Implementation of Shunt Active Power Line Conditioners using Novel Control Strategies

### **Electrical Engineering**

CHITTI BABU B	Study of Inverter-interfaced Wind Power Generation System under Balanced & Unbalanced Grid Voltage Conditions.
MATADA MAHESH	Performance Improvement of AC-DC Power Factor Correction Converters for Distributed Power Systems
Y SURESH	Investigation on Cascade Multilevel Inverter for Medium and High Power Applications
JOSE P THERATTIL	Dynamic Modeling and Control of Multi-Machine Power System with FACTS Devices for Stability Enhancement

### **Humanities & Social Sciences**

PRIYA S	A Needs-Based Approach to Teaching and Learning of English for Engineering Purposes
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### **Mechanical Engineering**

BIRANCHI NARAYANA PADHI	Thermal Modeling of Short Pulse Collimated Radiation in Participating Medium
SUDHIR KUMAR KASHYAP	Optimisation of Support Parameters in Mining Terrain Using Artificial Intelligent Techniques
ALUR SIDRAMAPPA	Experimental Studies on Plate Fin Heat Exchangers
BHAGAT SINGH	Study of Damping in Layered and Welded Beams
LAXMI NARAYAN PATRA	3D Analysis of Combined Extrusion-Forging Processes
AMIYA KUMAR DASH	Multiple Damage Identification on Beam Structure Using Vibration Analysis and Artificial Intelligence Techniques

### **Mining Engineering**

BANITA BEHERA	Experimental and Numerical Investigation into Behaviour of Fly Ash Composite Material in the Subbase of Surface Coal Mine Haul Road
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### **Physics**

NIRANJAN SAHU	Study of Crystal Structure and Electrical Properties on Lead Titanate and Lead Zirconate Titanate Based Ceramic Oxides
PRAKASH KUMAR PALEI	Structural and Electrical Properties of Conventional and Microwave Processed Lead Free KNN Based Ceramics

## **MASTER OF TECHNOLOGY (BY RESEARCH)**

### Department & Candidate's Name

### Title of the Thesis

#### **Biotechnology and Medical Engineering**

SATYA SUNDAR MOHANTY

Microbial Degradation of Phenol: A Comparative Study

#### **Ceramic Engineering**

ABHISEK CHOUDHARY

Synthesis and Characterization of Lithium Silicate Ceramic for the Test Blanket Module (TBM) in Fusion Reactors

#### **Chemical Engineering**

GANGIREDLA GAUTAMI

Modeling and Simulation of Multiple Effect Evaporator System

PRANATI SAHOO

Hydrodynamic Studies of Coarse, Fine and Nano Particles in a Cylindrical Fluidized/Spouted Bed: CFD Simulation

DEBALAXMI PRADHAN

Recovery of Value added Fuels from Waste Polyolefins / Bicycle Tyre and Tube

DIVYA RAJAVATHSAVAI

Study of Hydrodynamic and Mixing Behaviour of Continuous Stirred Tank Reactor Using CFD Tools

NAVEEN NOAH JASON

Self-Assembly of Colloidal Sulfur Particles on Flat Surfaces from Evaporating Sessile Drops

VAMSY KRISHNA GARAPATI

Bio Degradation of Petroleum Hydrocarbons

RAJESH TRIPATHY

Production of Hydrogen Gas from Biomass Wastes Using Fluidized Bed Gasifier

MINAKETAN RAY

Synthesis and Characterization of AgBr/SiO<sub>2</sub> Core/Shell Nanoparticles

SANKARANARAYANAN H

Synthesis, characterization and application of metal organic framework based membranes

#### **Civil Engineering**

MRUTYUNJAYA SAHU

Prediction of Flow and its Resistance in Compound Open Channel

TAPASWINI SAHOO

Experimental and Numerical Analysis of Foundation on Red Mud

ITISHREE MISHRA

Parametric Instability of Woven Fiber Composite Plates

NIRJHARINI SAHOO

Effect of Differential Roughness on Flow Characteristics in a Compound Open Channel

#### **Computer Science & Engineering**

SWASTISUDHA PUNYATOYA

GA-Based Fault Diagnosis Algorithms for Distributed Systems

SUNITA KUMARI Comparative Analysis of ICA Based Gender Classification Schemes

CHANDAK ASHISH VIRENDRA Task scheduling strategies in Grid

### **Electronics & Communication Engineering**

VIJAY KUMAR SHARMA Efficient VLSI Architectures for Image Compression Algorithms

VENKATESH S Multi User Chaotic Communication Systems Using Orthogonal Chaotic Vectors

### **Electrical Engineering**

SWAGAT PATI Performance and Power Factor Improvement of Indirect Vector Controlled Cage Induction Generator in Wind Power Application

JAYADEV JENA A Study of Rain Attenuation Calculation and Strategic Power Control for Ka-Band Satellite Communication in India

SUSHREE SANGITA PATNAIK Optimal Load Compensation in Three-Phase Four -Wire System using Active Power Filter Employing Various Control Schemes

T RAKESH KRISHNAN On Stabilization of Cart-Inverted Pendulum System: An Experimental Study

RAJA ROUT Control of Autonomous Under Water Vehicles

### **Mechanical Engineering**

SASMITA SAHU Vibration Analysis of Cracked Beam Using Intelligent Technique

BIKASH CHANDRA BEHERA Development and Experimental Study of Machining Parameters in Ultrasonic Vibration-assisted Turning

SRIMANT KUMAR MISHRA Processing, Characterization and Erosion Wear Response of Particulate Filled ZA-27 Metal Matrix Composites

ANKITA SINGH Studies on Some Aspects of Composite Machining

### **Mining Engineering**

SOUMYA RANJAN MALLICK Development and Evaluation of Clinker Stabilized Fly Ash Based Composite Material for Haul Road Application

### **Physics**

SANGHAMITRA ACHARYA Studies on Superconductor Nano Composite of  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8/\text{BiFeO}_3$

## MASTER OF TECHNOLOGY

### BIOTECHNOLOGY & MEDICAL ENGINEERING

#### Biomedical Engineering

ANNAPU REDDY RAMADEVI  
ANUPAMA RAY  
CHRIS MALLIKA BHADRA  
DEBABRATA SATAPATHY  
DEBLINA BISWAS  
JYOTIPRAKASH SATAPATHY  
LOKESH K A  
PINKI DEY  
PIYUSH SWAMI  
PRAVIN BHATTARAI  
SATYATEJA RATNAKARAM

#### Biotechnology

AADINATH  
ANKITA  
B SURESH REDDY  
DIPAK KUMAR SHAH  
DIVYANSHU MAHAJAN  
EDUNOORI TULASI PRATHYUSHA  
MANEESHA PANDEY  
MANORANJAN ARAKHA  
MD HOMAIDUR RAHMAN  
MONIKA RAJPUT  
RACHA HARISH KUMAR  
RUKMINI ROY  
SHAIK MULLA SHAHNSHA  
SMITA PRIYADARSHINI PILLA  
SUNIL KUMAR KASHYAP  
SWAPNA NAMANI

### CERAMIC ENGINEERING

#### Ceramic Engineering

TAPAS MAHATA

### CHEMICAL ENGINEERING

#### Chemical Engineering

GHOSHNA JYOTI  
KRISHNENDU CHATTERJEE

LIPIKA KALO  
LISA SAHOO  
MANOJ KUMAR MAHAPATRA  
RAKHI SONI  
SANJUKTA BHOI  
SASWAT KUMAR PRADHAN  
SREERUPA SARKAR  
STUTEE BHOI  
T VIJAY RAGHAV KUMAR  
TANMAYA KUMAR LIMA  
TANU SINGH  
TAPASH RANJAN MAJHI  
URMI MULLICK

### CIVIL ENGINEERING

#### Geotechnical Engineering

MAHASAKTI MAHAMAYA  
MAMATA MOHANTY  
RAJIV LOCHAN SAHU

#### Structural Engineering

BHOSALE AVADHOOT SHIVAJI  
BIJILY B  
CHHABIRANI TUDU  
HEMANTH KUMAR G  
KIRTI KANTA SAHOO  
KISAN JENA  
MALLIKARJUN B  
PARAMANANDA KUNDU  
SANTHOSH PUSHPARAJ D  
SNEHASH PATEL  
SNIGDHA MISHRA  
SOUMYA SUBHASHREE  
SUJI P  
SUKKUMAR BEHERA  
VENNA VENKATESWARAREDDY

#### Transportation Engineering

BIDYUT BIKASH SUTRADHAR  
DEBASHISH KAR  
SIDDHARTH PUROHIT

SMRUTI SOURAVA MOHAPATRA

**Water Resources Engineering**

NIBEDITA GURU

SHREEDEVI MOHARANA

**COMPUTER SCIENCE &  
ENGINEERING**

**Computer Science**

AMIT KUMAR TRIVEDI

BALAJI SRIKANTH SIRIGIRI

ETUARI ORAM

HARSH VARDHAN SHARMA

MADHU RAKESH YENUGUDHATI

MADHUMITA PANDA

MUKESH KUMAR

NEETHU KRISHNA

NUNSAVATU V NAIK

RAJIB SARKAR

SILVERU OMNARAYANA

SUJAYA KUMAR SATHUA

SUKESH BABU V S

SUNIL KUMAR GOUDA

UMA DEVIKA BODAPATI

VISHNU PRASAD SAKHAMURI

ZUNJARE PRATIBHA SHANKAR

**Information Security**

ANIL KUMAR SAHU

BANAMALI SINGH

BIJAYINEE MOHARANA

BRAJESH KUMAR KASHYAP

DEEPAK PUTHAL

HEMANTH KUMAR VOTARIKARI

INDRA JEET GUPTA

KRISHNA TEJA KESINENI

KRITI BHUSHAN

LEKHRAJ BELCHANDAN

RAJESH P

SAMSONANOSHBABU P

SHUVANWITA SUKHADARSINI

SMRITI GUPTA

SRIKANTA KUMAR SAHOO

TARUN SARAVAGI

UMAKANTA MAJHI

V HARISH KUMAR

**Software Engineering**

AAKANKSHA SHARAFF

BHARATI SINHA

DEEPIKA CHANDRAWANSHI

DINESH KUMAR PRABHAKAR

GUDUPU SUNEEL KUMAR

JAGANNATH SINGH

JAYADEEP PATI

MANIKANT PANTHI

MEGHA KESHARWANI

NARASIMHANAIAK BANAVATH

NIBEDITA

NIVEDITA PANDEY

PRASHANT AWASTHI

ROSHAN P KOSHY

SANDEEP KUMAR DASH

SANJAY PRASAD KUSHWAHA

SUPRIYA AGRAHARI

SURAJ SHANKAR ROY

VIKAS PANTHI

**ELECTRONICS & COMMUNICATION  
ENGINEERING**

**Communication & Signal Processing**

AASHISH MALLICK

ANIL CHACKO

ARAVINDA REDDY KUNDOORU

C PAVAN KUMAR

CHAITANYAKUMAR KARAMPUDI

CHITHRA R

DEEPAK KUMAR PANDA

DHANYA V V

HIMANSHU BHUSAN MISHRA

IMTIYAZ KHAN

KONDALARAO JYOTHI

MADHUSUDAN DE

MANISH B DAVE

PRAVEENKUMAR YADLAPALLI

RAMVATH ASHOKKUMAR

SHASHANK  
SRIDHAR BABU C  
SUSHANTA KUMAR SWAIN  
TUSAR RANJAN SWAIN

**Electronics & Instrumentation Engineering**

ARUNAVA KARMAKAR  
BIBHUTI BHUSAN PRADHAN  
BRAJESH KUMAR  
DEEPIKA ORAON  
GOPIKRISHNA SARAMEKALA  
JYOTIPRASANNA PATRA  
MANASH KUMAR SETHI  
MD ASHRAF JAMAL  
N SANTOSH KUMAR RAO  
NAGARAJU L  
PRASHANT KUMAR MOHANTY  
RASHMI PANDA  
ROOPAL AGRAWAL  
SANKATA BHANJAN PRUSTY  
SHRAVAN KUMAR SINGH

**Telematics & Signal Processing**

BIKASH RANJAN PANDA

**VLSI Design & Embedded System**

A VIJAYA KUMAR  
ASHUTOSH ABHISHEK  
BISHWO RAJ MANANDHAR  
GEETANJALI JENA  
KORRAPATI RAGHURAMAIAH CHOWDARI  
LOPAMUDRA SAMAL  
MALLIKARJUNA NAIK B  
PANDYALA VIJAY KUMAR REDDY  
PRASANTA KUMAR CHOUDHURY  
RAJULAPATI BHARAT KUMAR  
RAKESH KUMAR RAVI  
RAKESH TIRUPATHI  
RAMANJANEYULU A  
SAUVAGYA RANJAN SAHOO  
SHIVA KUMAR GODUGU  
SUCHARITA JENA  
SUMIT KUMAR SAO  
TAPAS RANJAN JENA

**ELECTRICAL ENGINEERING**

**Control and Automation**

ABHISEK PARIDA  
ANAND SINGH  
DEBJYOTI ROY  
MADAN MOHAN RAYGURU  
MANJULATA BADI  
MANORANJAN DAS  
MAROJU SANTOSH KIRAN  
MILI BARAI  
MURALIDHAR KILLI  
NISHANT KUMAR  
NIVEDITA PATI  
OMPRAKASH PAHARI  
PRADOSH RANJAN SAHOO  
PRAWESH KUMAR MANDAVI  
SANJAY KUMAR ROUT  
SUSANT KUMAR PANIGRAHI  
SWARUP NARAYAN MALLIK  
YOGESH KUMAR PATEL

**Electronic Systems & Communication**

ABHISEK PATRA  
ANAND PRAKASH  
BHAKTAPRIYA MOHAPATRA  
BHARATH KELOTHU  
CHAKRAPANI TALLURI  
CHOUDHURY SASMITA DAS  
GANGADHAR GONTHIA  
K GEETA MADHURI  
KONDABATHINI SRIDHAR  
NARLA DILEEP  
PAVAN KUMAR KORIBILLI  
PRAKASH KUMAR PANDA  
SANTHOSH AITHA  
SHAFEEQUE I  
SUNIL KUMAR  
SURENDRA NAGA  
V SRIKANTH  
VISHNU VIDYADHARA RAJU V

**Power Control & Drives**

ALOK KUMAR PRADHAN  
ASHISH RANJAN DASH  
AVAYA KUMAR SAHOO

DIPTI MOHANTA  
FASIL V K  
HAREESH MYNENI  
LIPSA PRIYADARSHANEE  
MD EHTESHAM  
MINAKHI BEHERA  
RAHUL KUMAR DUBEY  
SANGRAMA KESARI NAYAK  
SANTHOSH YEDLA  
SRIKANTH NADIPINENI  
SUDEEP BEHERA  
SUNEEL RAJU PENDEM  
SURAJ Y

## **MECHANICAL ENGINEERING**

### **Machine Design & Analysis**

ARGADE DIPAK APPASAHEB  
BALJINDER SINGH  
CHINMAYA SAHU  
HEMANTA KUMAR RANA  
HEMENDRA KUMAR PATEL  
LAYATITDEV DAS  
MANOJ KUMAR MUNI  
PATIL BHUSHAN RAMCHANDRA  
PHADATARE HANMANT PANDURANG  
PRANAYAJOSHI CHANDOLE  
R PUNITH  
SHARAD SHEKHAR PALARIYA  
SUDHAKAR MAJHI  
SUDHANSU MEHER  
TEJAS KALKUNDRIKAR  
WASEEM AKRAM  
YOGESH SINGH

### **Production Engineering**

ANSHUMAN KUMAR  
ASHIRBAD SWAIN  
BABURAJ M  
BALASANKULA PRANEETH KUMAR  
CHITRASEN SAMANTRA  
D SAHITYA  
DEBAPRASANNA PUHAN  
DILLIP KUMAR MOHANTA  
JAMBESWAR SAHU

KALINGA SIMANT BAL  
KUMAR ABHISHEK  
PRITY ANIVA XESS  
PRIYANKA JENA  
RAJESH KUMAR VERMA  
SHIBA NARAYAN SAHU  
SUMAN KUMAR  
SUPRIYA SAHU  
VIVEKANANDA KUKKALA  
YOGESH RAO

### **Thermal Engineering**

AJAYA KUMAR SUTAR  
ANKIT KUMAR DUBEY  
DAYASHANKAR SINGH RATHORE  
GOPI KRISHNA VUPPUTURI  
JAYASHREE NAYAK  
KULDEEP PATHOEE  
KUNJA BIHARI KATIAR  
KUSH KUMAR DEWANGAN  
MOTIUR RAHMAN  
MUKARE ROHIT ROHIDAS  
P CHANDRA SEKAR  
RADHARAMAN DALAI  
SHAIBU V B  
SIMARANI BEHERA  
SOUMYA JYOTI CHATTERJEE  
UNDALE NIKHIL JAYANT  
VINAY SHRIVASTAVA  
VINOD NAIK R  
WARADE VIVEK PRALHAD

## **METALLURGICAL & MATERIALS ENGINEERING**

### **Metallurgical & Materials Engineering**

AJIT BEHERA  
CHANDANA PRIYADARSHINI SAMAL  
LAKSHMANA RAO TANGI  
SANDEEP KUMAR SAHOO  
SAURABH KUMAR  
SRIKAR POTNURU  
SUJATA PANDA  
VIKAS SAHEB

## MASTER OF SCIENCE

### CHEMISTRY

#### 1st Class

ALAKA SAMAL  
ANUPAM SAHOO  
ARNAB BHOWMICK  
ARNAB MAHATO  
CHITTA RANJAN BISWAL  
DEEPAK SAHU  
DIIPIKA PRIYADARSINI JENA  
IPSITA DE  
ITISHREE RATHA  
JUISA NANDINI PATRA  
JYOTSNA BINDHANI  
KAUSIK SAHU  
LIPEEKA ROUT  
MADHABI SETH  
MADHUSHREE  
MADHUSMITA TRIPATHY  
MANAS RANJAN PRADHAN  
MANASWINI NAYAK  
NIHARIKA DAS  
NIRAJ KUMAR PANDEY  
POONAM KUMARI  
PRITI SAHU  
RAJENDRA KUMAR SAHA  
RAJIB KUMAR DEY  
RATIKANTA SAHOO  
SABUJ DHAR  
SAGARIKA PATTANAYAK  
SANGEETA SETHY  
SHABNA PATEL  
SHILPA JENA  
SRIKANTA MOHARANA  
SUSANTA KUMAR BEHERA  
SUSHREE NIBEDITA SAHU  
SUSHREE SWETA LEENA  
SUSMITA MOHANTA  
SWAPNA GHOSH  
SWASTIKA MITRA

### LIFE SCIENCE

#### 1st Class

ABHIPSA MISHRA  
AKASH TIWARY  
ANNAPURNA SAHOO  
ARCHANA BHOI  
CHANDAN KANTA DAS  
CHANDRA SEKHAR BHOL  
DEBADUTTA BHOI  
DEBASIS NAYAK  
GAGAN KUMAR PANIGRAHI  
GOURI SHANKAR HARIPAL  
HIMANI SETHI  
KARMJIT SINGH  
KAVALA PARIMALA  
KIRTIMAYEE SAHOO  
MANISHA MISHRA  
MOUMITA SAHOO  
NILADRIMOHAN DAS  
NITU MAJHI  
POOJA THAKUR  
RASHMI REKHA SAHOO  
REJITHA NAIR  
REKHA MARNDI  
ROMA SINHA  
SANGEETA MINZ  
SASWATI SWAIN  
SHALINI SRIVASTAVA  
SNEHA CHAKRABARTI  
SNEHA PRASAD  
SOBHA BISWAL  
SOMYA RANJAN PATRA  
SONITA PRADHAN  
SUBHOSHMITA MONDAL  
SUDIP SAMAL  
SUPRIYA KUMARI  
SWATI CHAUHAN

### MATHEMATICS

#### 1st Class

AKANKSHA

NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA

BISHNUPRIYA SAHOO  
DEO KUMARI SAHU  
KSHYANAPRABHA BEHERA  
LIPIKA PARIDA  
PALASH SAHOO  
PANKAJ KUMAR SHARMA  
POOJA  
PRASANTA KUMAR OJHA  
PURNIMA SATAPATHY  
RICHA SINGH  
SARANGAM MAJUMDAR  
SATARUPA RATH  
SUEET MILLON SAHOO  
SULAGNA MOHANTY  
THOKCHOM CHHATRAJIT SINGH

**2nd Class**

ARCHANA MISHRA  
GAYATRI SATAPATHY  
LAXMAN KUMAR PRADHAN  
PRAMOD KUMAR PARIDA  
T SWATI

**PHYSICS**

**1st Class**

ABAKASH PRADHANI  
ARCHANA SHUBHADARSHANI PADHI  
BAMADEV DAS  
BINDUSHREE SAHOO  
BISHNUPRIYA BHOL  
DIPTIRANJAN ROUT  
KANCHAN KUMARI SHARMA

LUNA BHOWMICK  
MADHUSMITA NAIK  
MADHUSMITA SWAIN  
MANORANJAN SAMAL  
MEETA ASHOK KAMDE  
NIMISHA KASHYAP  
NIRJHARINI SAMAL  
NISHA KUMARI SINGH  
PALLAVI SUHASINEE BEHERA  
PARADARSINI PARIDA  
PRAJNA LIPSA MOHARANA  
PRATAP KUMAR SAHU  
RAMESH CHANDRA HUIKA  
RINKI CHOUDHURY  
ROSALIN BEURA  
RUTUPARNA MOHANTY  
SANJAYA KUMAR PARIDA  
SARITARANI MAHARAJ  
SHREELEKHA MISHRA  
SHREENU PATTANAIAK  
SMITA PANDA  
SNEHAMAYEE DAS  
SOMALINA SWAIN  
SOUMYA RANJAN DASH  
SUNITA BEHERA  
SURYA PRAKASH GHOSH  
SUSHREE SANGITA MULLICK  
SWAGATIKA BHOI  
TRIPTA PARIDA

**2nd Class**

CHINMAYA DHARAI

## **MASTER OF ARTS IN DEVELOPMENT STUDIES**

### **1st Class**

GARGI DAS  
HEMANTA KUMAR PRADHAN  
MANJIT MAHANTA  
ROJALIN SAMAL  
SAROJINI BEHERA  
SOUMYA MOHANTY  
SURESWARI DAS  
VIJAY ORAON

## **MASTER OF BUSINESS ADMINISTRATION**

### **1st Class**

AJIT KUMAR SETH  
AMITA KHUNTIA  
ANIMESH KUMAR SRIVASTAVA  
BRAJESWAR DAS  
DEBASISH NAYAK  
HARISH KANDULA  
KAUSHIK LAHA  
MAHENDRA KUMAR KHUNTIA  
MONALISA BHUYAN  
NIVEDITA BISWAL

PRIYANKA PARIDA  
RAJESH KUMAR MISHRA  
RAJESH RANJAN SINHA  
RANJEEB KUMAR PADHI  
ROJALINA NANDA  
SATYA NARAYAN PANDA  
SUSHANTA KUMAR SAHU  
SYED MOHAMMED KARIM  
UPALI IPSITA DAS  
VIVEK KUMAR MOHAPATRA

## BACHELOR OF TECHNOLOGY

### BIOMEDICAL ENGINEERING

#### Honours

AMRIT PRAHARAJ  
P SHASIKALA  
RAJLAXMI CHOUDHURY  
RAUNAQ PRADHAN  
SUSHMA BHANDARI

#### 1st Class

BHAVIRISETTY RAVI TEJA  
MARK LALDUHSAKA  
MONICA TUDU  
PANKAJ KUMAR  
RAJAN ANAND  
SONTI VAMSY KRISHNA SASTRY  
SWATI PASWAN  
VIVEK MISHRA

### BIOTECHNOLOGY

#### Honours

ANJUL KHADRIA  
SATYAVIKASH BHUYAN  
SHABINA ASHRAF  
SIDDHARTH BISWAL  
SONALI NANDA  
SUMON RUDRA

#### 1st Class

AMULYA ANIMESH  
GANESH KUMAR SWAMI  
JYOTIRMOY SETHY  
MANOJ KUMAR BEHERA  
NIKHIL  
PARUL PATEL  
PRADEEP BHAGAT  
PRIYANKA

### CERAMIC ENGINEERING

#### Honours

ALOK PATRO  
ANKITA BILUNG

ANSUMAN MISHRA  
HARA PRASAD MURTY  
KAVITA BISOYI  
PRAKASH PRADHAN  
PURAB DAS  
RAMU RANJAN MEHER  
SOHAN CHOUDHURI  
SOUMYA SURABHI  
VISHESH BAGARIA

#### 1st Class

ABINASH LENKA  
AMRIT ABHISHEK DHAL  
ANUPAM MISHRA  
ASHISH KUMAR PANDA  
HARAPRASAD RAUT  
KUNAL KUMAR TANTY  
PHILOMINA EKKA  
PRATEEK KUMAR PUJARI  
RAHUL KUMAR MALLIK  
SANJEEV KICHE RAI  
SHRAVAN KUMAR KANTHA  
SUSRI SANGEETA  
UDIPTA THAKUR

#### 2nd Class

MEENA SEEMA NANDBIHARI

### CHEMICAL ENGINEERING

#### Honours

ABHIJIT DALAI  
ABHISHEK DASH  
ANNAVAJHALA MRUDULA  
ARUNIM BOSE  
BIJAYANI BISWAL  
CHETNA PARASHAR  
CHITTARANJAN PANDA  
DEEPAK GARG  
JITENDRA KUMAR PATRO  
KREETI DAS  
KUMAR VIKASH  
MONALISHA NAYAK  
MS PREETI AGARWAL

RAHUL SINHA  
RASHMI PRAVA MOHANTY  
SAGAR SOURAV  
SOUMYA RANJAN PATI  
SUBHADARSHINEE SAHOO  
VINAY KUMAR AGARWAL

**1st Class**

ABHINAV MALVIYA  
ANKIT KUMAR AGRAWAL  
ASHOK KUMAR SAHOO  
AVILASH BISWAL  
BARSHA MARANDI  
KHANDEPARKER ASHISH SATISHCHANDRA  
KIRAN CHANDRA NAYAK  
KULDEEP PRADHAN  
MANOJA KUMAR MALIK  
PARTHA PRATIM PANDA  
ROHIT PRABHAKAR  
SASMITA HEMBRAM  
VARSA PRIYADARSHINI  
YOGESH CHANDRA MOHARANA

**2nd Class**

DHANANJAY SINGH  
RUPAM RANJAN BISWAL

**CIVIL ENGINEERING**

**Honours**

SAUJANYA KUMAR SAHU  
ABHISEK SWAIN  
ABHISHEK AGARWAL  
ANKUSH BANSAL  
ANWESHA SAHOO  
BISWANATH PRUSTY  
DEBASIS BASA  
DIPAYAN CHOUDHURY  
GAURAV KUMAR  
KUMARI PRATIBHA  
MAITHILI MOHANTY  
NILADRI BIHARI MAHANTY  
PRAVAL PRIYARANJAN  
SOMYA RANJAN NAYAK  
SUBHRANSHU DWIBEDI

**1st Class**

ANIRUDH KUMAR  
ANKUR AGRAWAL  
ANKUR MEENA  
ARPAN SEN  
ASHIS DEBASHIS BEHERA  
ASHVIN KUMAR MEENA  
BALABHADRA MARNDI  
FALGUNI KRISHNA PRASAD MISHRA  
JYOTI PRAKASH SAMAL  
LIPI MISHRA  
MAYURESH PANDA  
PRASANTA KUMAR BAGE  
RAJENDRA SOREN  
RANDHEER SINGH  
RAVADA SURENDRA DIKSHITH  
RISHABH KASHYAP  
SHIVAM BOSE  
SOUMYA RANJAN DHAL  
SUDHIR KUMAR JENA

**COMPUTER SCIENCE &  
ENGINEERING**

**Honours**

ABHINANDAN ARYADIPTA  
ACHIN MISHRA  
AMIT TRIPATHY  
AMLAN KUMAR NAYAK  
AVISIKTA SAHOO  
BIBEKANAND MINZ  
BIBHAS MISHRA  
BISWA BHUSAN BISWAL  
KAUSTAV NAG  
KESHAV AGARWAL  
KOTHA DILEEP KUMAR  
LIPSA SAHU  
MANABESH MANDAL  
MD RAIYAN ALAM  
MOHIT AGRAWAL  
MRUTYUNJAYA LENKA  
MSSA RAGHUVeer  
MUKESH KUMAR MISHRA  
NITESH KUMAR  
NITISH KUMAR PANIGRAHY  
PRAVAT KUMAR SAHOO  
PRIYARANJAN BEHERA

RAHUL SINGH  
RANA YASH VEER  
RANABOTHU NITHIN REDDY  
RUBY DEV  
SANDEEP SINGH CHHABADA  
SOUMYA RANJAN MUND  
SWAPNAJEET PADHI  
TARANNUM  
TITHY SAHU  
UTKARSH  
VIVEKANANDA PANIGRAHY  
VULISETTY ANUJA SWETHA  
YOGESH KUMAR JAIN

**1st Class**

ABHISHEK SINGH  
AMIT KUMAR  
ANIMESH DAS  
ANKIT GUPTA  
ANKIT SAXENA  
ANSHUL PANDEY  
AVINASH BEHERA  
BIJENDRA BEHERA  
BINAY PRAKASH DUNGUNG  
CHANCHAL CHITWAN  
DEEPANKAR SINGH PURNIYA  
DHEERAJ KUMAR  
DHEERENDRA KUMAR SRIVASTAVA  
GOVIND UPMAN  
KEDAR SANKAR BEHERA  
KUSHAGRA PANDEY  
MAHENDRA BEHERA  
MIHIR BIRUA  
NILAGIRI BHARGAV  
NITESH KUMAR  
PRATEEK PAWAN  
PUSPANJALI KUMARI  
RAJAT KUMAR SORENG  
RAKESH  
RAVI KUMAR SINGH  
S. UMESH  
SANAMANDRA VAMSI  
SANJEEB KUMAR PADHAN  
SHAKTHI YOKESH JEEVAGAN  
SHANTI SWAROOP SWAIN  
SUKANTA KUMAR MANGAL

SUNIL ORAM  
VED PRAKASH SONKER

**2nd Class**

DIPESH KUMAR SOLANKI  
JAYAJIT KUMAR PRADHAN  
MANAT KANHER  
PRANAV KUMAR  
TOKETO SHOHE

**ELECTRICAL ENGINEERING**

**Honours**

ABHIJEET HALDAR  
ABINASH MOHAPATRA  
ANUJA SINGH  
ANUPAMA DEO  
ANURAG MOHAPATRA  
ARADHANA NAYAK  
ARADHANA PRADHAN  
ARYA KUMAR SWAGAT RANJAN SWAIN  
ASHIRBAD SAHOO  
ASHISH ANKUR  
ASHIT KUMAR SWAIN  
AYENAMPUDI PRAVEEN VARMA  
BAIJAYANTI MALA DAS  
BHATIA AMITPAL SINGH IQBAL SINGH  
BIBEK MISHRA  
BIBHU PRASANNA KAR  
BINITA SEN  
BISWAJEET PANDA  
DUBASI MONIKA  
DUSHYANT SHARMA  
G BHARGAVI  
HIMANSHU MAHARANA  
HUMA KHAN  
KARANKI DINESH  
KOTHURI BALA CHAKRI  
MAHESH PRASAD MISHRA  
NUPUR JHA  
PADMAJA THATOI  
PALLAVI BEHERA  
ROSAN MARIA  
SAURAV SATPATHY  
SOUMYA RANJAN MOHANTY  
SOUMYA RANJAN SAHOO  
SUNIL BEHERA

SURAJ MISHRA  
VARUNEET VARUN  
VINIT KUMAR GUPTA

**1st Class**

AJIT KUMAR SATPATHY  
ALOK KUMAR TULSIAN  
BANOTH MADHU  
BEDAPRAKASH RATHA  
BIJOYPRAKASH MAJHI  
BISWADARSHI NAIK  
CHAITANYA PRASAD MURMU  
DEBAYAN CHAKRABORTY  
DEEPAK KUMAR SINGH  
DEEPAKRAJ SAHU  
GAURAV AGARWAL  
IBADAHUN PATHAW  
JANMEJAYA HOTA  
JYOTI RANJAN BEHERA  
KANHU CHARAN PATRA  
KUNDAN KUMAR  
MANJEET VASHISTHA KANOJIYA  
PIYUSH PANDA  
PRAKASH MALLICK  
RAJESH KUMAR BARIK  
SAMBIT KUMAR DWIVEDI  
SAMRAT SUNA  
SARTHAK PATNAIK  
SATYAJEET NAYAK  
SIDDHAHAST MOHAPATRA  
SIDHARTH SHARMA  
SOURABH KUMAR  
SOURAV ANAND SETHI  
SUNEET NAYAK  
TUSHAR MISHRA  
VISHWARATH BHADAURIA

**2nd Class**

REGAN KUMAR SETHI

**ELECTRONICS & COMMUNICATION  
ENGINEERING**

**Honours**

ABHIJIT TRIPATHY

ABHISHEK DAS  
ABHISHEK SAHOO  
AMIT ARUP NAYAK  
AUROSHIS DAS  
BIRUPAKSHA BHATTACHARJEE  
CHEEDELLA PHANI TEJA  
GOUDU J K CHAITANYA  
HIMANSU SAHU  
IMMADI INDUMATI ANUSHA  
MUKESH KUMAR  
PRIYADARSHINI MULLICK  
PRIYARANJAN SWAIN  
RANJAN KUMAR RATH  
SABYASACHI SETHI  
SIDHARTH DAS  
SOHINI BANDOPADHYAY  
SUMEET KUMAR DANDAPAT  
SUNIL GAUTAM PANDA  
SURAJ DASH  
SUSRUTA CHAKRABORTY

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ARUP AVISHEK BEHERA  
BIRAM BABURAY BASKEY  
DARSHANI RAUTRAY  
GURU GAURAV RAY  
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KUNDAN KUMAR DAS  
LEO KURIANS PAULOSE  
MANAS RANJAN DAS  
SATYAKI MASCHARAK  
SUNIL BARLA  
SUNIL KUMAR KILAKA

**2nd Class**

ASHISH EKKA  
RAHUL WARKADEY

**ELECTRONICS &  
INSTRUMENTATION ENGINEERING**

**Honours**

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ARGHYAPRIYA CHOUDHURI  
ASUTOSH MISHRA  
BIRENDRA NATH TRIPATHY  
CHINMAYEE DAS  
DEBESH KUANR  
LOKANATH TRIPATHY  
MD ANISH  
NEEHARIKA DAS  
OMKAR PRASAD MISHRA  
PARUL PRADHAN  
PAVAN KUMAR JAIN  
SAMBIT DASH  
SOMJIT SWAIN  
SOURAMYA PRADHAN  
SUMAN SOURAV DIKSHIT  
SWETALINA PANIGRAHI

### 1st Class

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MONALISHA TOPNO  
NIRUPA MAJHI  
PRASANT KUMAR BEHERA  
SAHIL PAHUJA  
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THAKUR PAPPUKUMAR ARUN

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JABLUN KERKETTA  
JATINDRA KUMAR SINGH

## **MECHANICAL ENGINEERING**

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ANIKET NANGIA  
ANSHU JAGNYAK BEHERA

ANURAG SINGH  
ASHISHMAN KAR  
ASHUTOSH CHOUKSEY  
BIKASH MOHANTY  
BRIJESH KUMAR SINGH  
DEBASIS DANI  
DEEPAK KUMAR AGARWAL  
DEEPAK KUMAR MAHAPATRA  
DIBYENDU KUMAR MOHANTA  
JATIN AGRAWAL  
N. SUDHIR  
NISHAN DAS  
OJASWI PANDA  
PENUMATSA LOKESH VARMA  
PRADEEPTA KUMAR SAHOO  
PRASHANT SINGH  
RAHUL RANJAN  
ROHAN KUMAR SABAT  
ROHIT KUMAR SINGH  
SANJOG BARIK  
SHASHANK DEORAH  
SITESH KUMAR GOEL  
SUDHIR KUMAR DASH  
SUJIT KUMAR SAHOO  
SUNIL KUMAR PANDA  
SUYASH MISHRA  
TAPAN KUMAR HALDIGUNDI  
UMAKANTA BEHERA  
VISHWAJEET KUSHWAHA

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ANKIT SINGH  
ASHUTOSH SHARAN  
AYUSH PODDAR  
CHITTA RANJAN MEHER  
DEEPAK BEHERA  
DILIP KUMAR BAGAL  
IRSHANT SRIRAMKA  
KULWANT SINGH PARIHAR  
KUMAR AMAN  
KUSHAGRA NIGAM  
MANOJ KUMAR BELDAR  
MOHAN CHARAN SETHI  
NIKHIL CHINTHAPATLA  
PANKAJ KUMAR

PRADYUMNA KESHARI MAHARANA  
PRADYUMNA KUMAR GIDHI  
PRATIK MISHRA  
PRAVEEN KUMAR  
RAHUL CHANAP  
ROHIT KUMAR GOUTAM  
ROHIT RAJAN  
RUDRANARAYAN KANDI  
SATYA PRAKASH PRADHAN  
SATYARANJAN SAHOO  
SURYANSH CHOUDHURY  
SUYASH SAHAY  
TANMAYA KUMAR NAYAK  
TOM ATUL DUNG DUNG  
VASANTH SAI VISWAKARMA ANASURI  
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## **METALLURGICAL & MATERIALS ENGINEERING**

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DIBYARANJAN PRUSTY  
GAYATRI YADAV  
HITAINDRAN KUMAR PRADHAN  
KSHITIZ ANAND  
NACHIKETA MOHANTY  
PRIYA SINGH  
RAJESH GOEL  
SATYANARAYAN DHAL  
SIBABRATA MOHANTY  
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MANAS RANJAN SETHI  
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DEBASIS RATH  
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MAHARSHI BHADURI  
MANAS RANJAN BHOI  
PRAKASH PRABHAKAR  
SAMAY RASHMI NANDA  
SAMRAT DUTTA  
SANTOSH KUMAR MIRDHA  
SUKALYAN DAS  
SUNIL KUMAR SINGH  
VEMANA BALAJI



# राष्ट्रीय प्रौद्योगिकी संस्थानम् राउरकेला

## दीक्षांत - प्रतिज्ञा

सर्वे वयं राष्ट्रीय प्रौद्योगिकी संस्थानस्य स्नातकाः अस्मिन् महार्धे महोत्सवे समवेताः शपथमिदं पठामः यत् :-

विविध वैषयिक स्नातकाभियांत्रिकभावेन परमनिष्ठाया त्यागेन च सह सदैवं स्व-स्व कर्तव्यं सुचारुः संपादयिष्यामः ।

येन केन परिस्थित्यागतेनापि व्यक्तिगतस्वतंत्रतायाः वृत्तिगत मुल्यबोधस्य च संरक्षणाय सततं चेष्टिष्यामहे ।

पुनश्च अत्रोपार्जितं सूचना - प्रयुक्ति यंत्रविज्ञान ज्ञानराशिं च विश्व मानवसेवायां नियतं विनियोज्य अस्य अस्मद् महागुरुकुलस्य सुचिरं सम्मानमक्षुण्णं रक्षिष्यामरितिशम् ।



**NATIONAL INSTITUTE OF TECHNOLOGY  
ROURKELA**

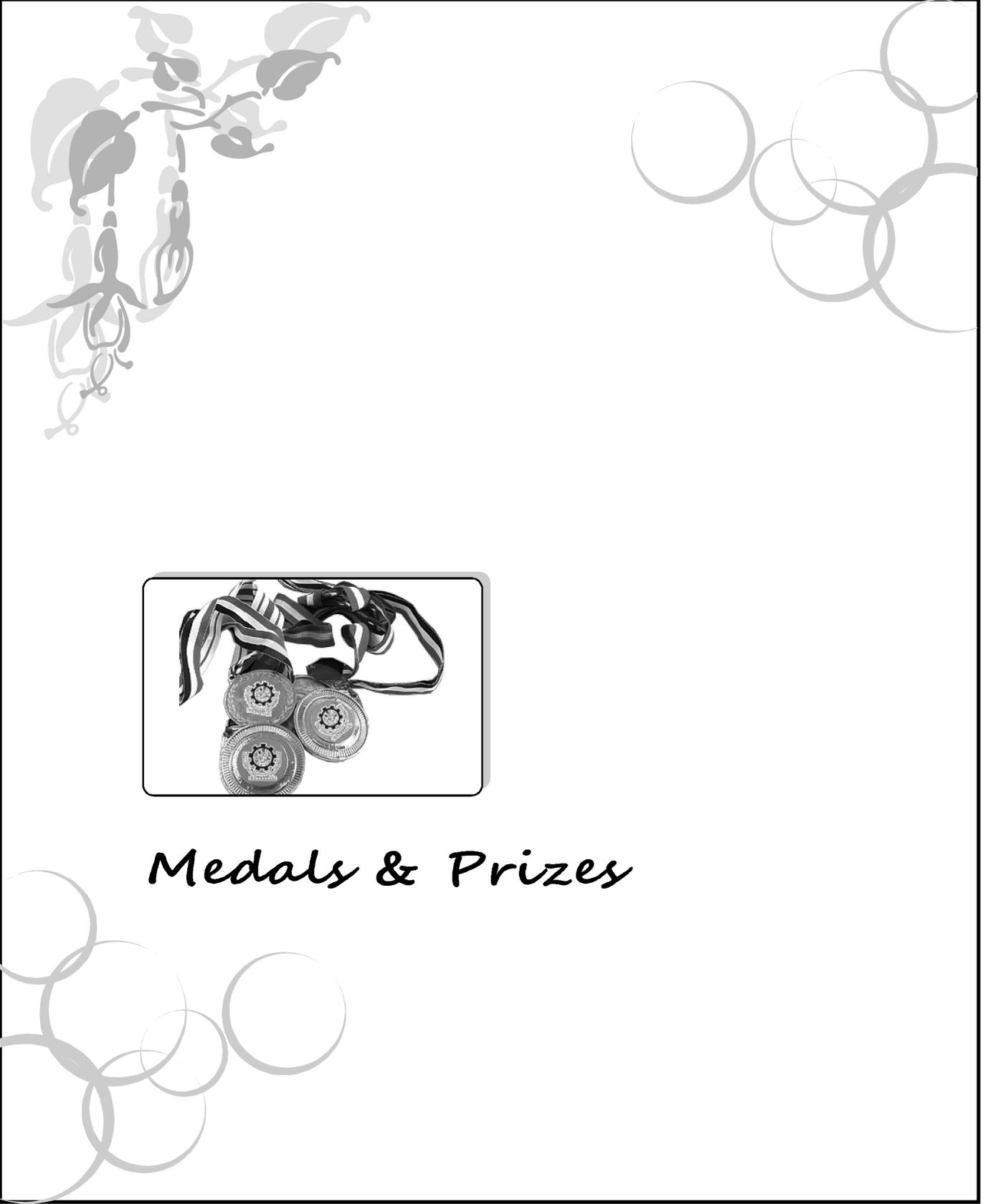
  
**P L E D G E**  


We the students of the National Institute of Technology, Rourkela, graduating in the year 2012, hereby pledge -

"That we will discharge our duties as Engineers, Scientists, and Technologists with utmost sincerity and dedication,

That we will strive under all circumstances to maintain individual dignity and professional integrity, and

That we will utilize our knowledge in the field of Science and Technology to serve the humanity and to uphold the dignity of our Almamater"



*Medals & Prizes*

Colour Page  
Students

## INSTITUTE SILVER MEDALS

### 1. Undergraduate courses (B.Tech)

Biomedical Engineering	:	Amrit Praharaaj
Bio-technology	:	Siddharth Biswal
Ceramic Engineering	:	Ansuman Mishra
Chemical Engineering	:	Vinay Kumar Agarwal
Civil Engineering	:	Maithili Mohanty
Computer Science and Engineering	:	Tithy Sahu
Electrical Engineering	:	G Bhargavi
Electronics and Communication Engineering	:	Immadi Indumati Anusha
Electronics and Instrumentation Engineering	:	Pavan Kumar Jain
Mechanical Engineering	:	Anurag Singh
Metallurgical and Materials Engineering	:	Dibyaranjan Prusty
Mining Engineering	:	Harshit Agarwal

### 2. POSTGRADUATE COURSES

#### M.TECH

##### *Department and Specialization*

#### **Biotechnology and Medical Engineering**

#### **Topper**

Specialization: Biomedical Engineering

: Pravin Bhattarai

Specialization: Bio-technology

: Divyanshu Mahajan

#### **Ceramic Engineering**

Specialization: Ceramic Engineering

: Tapas Mahata

#### **Chemical Engineering**

Specialization: Chemical Engineering

: Stutee Bhoi

#### **Civil Engineering**

Specialization: Geotechnical Engineering

: Rajiv Lochan Sahu

Specialization: Structural Engineering

: Bijily B

Specialization: Transportation Engineering

: Smruti Sourava Mohapatra

Specialization: Water Resources Engineering

: Shreedevi Moharana

#### **Computer Science and Engineering**

Specialization: Computer Science

: Harsh Vardhan Sharma

Specialization: Information Security

: Anil Kumar Sahu

Specialization: Software Engineering

: Nibedita

#### **Electrical Engineering**

Specialization: Electronic Systems & Communication

: Sridhar Kondabathini

Specialization: Power Control & Drives : Minakhi Behera

Specialization: Control and Automation : Abhisek Parida

**Electronics and Communication Engineering**

Specialization: Communication & Signal Processing : Himanshu Bhusan Mishra

Specialization: Electronics & Instrumentation Engineering : Rashmi Panda

Specialization: VLSI Design & Embedded System : Sauvagya Ranjan Sahoo

**Mechanical Engineering**

Specialization: Machine Design & Analysis : Manoj Kumar Muni

Specialization: Production Engineering : Jambeswar Sahu

Specialization: Thermal Engineering : Radharaman Dalai

**Metallurgical and Materials Engineering**

Specialization: Metallurgical and Materials Engineering : Sujata Panda

**MASTER OF ARTS**

Humanities : Rojalin Samal

**MASTER OF SCIENCE**

Chemistry : Anupam Sahoo

Life Science : Chandan Kanta Das

Mathematics : Purnima Satapathy

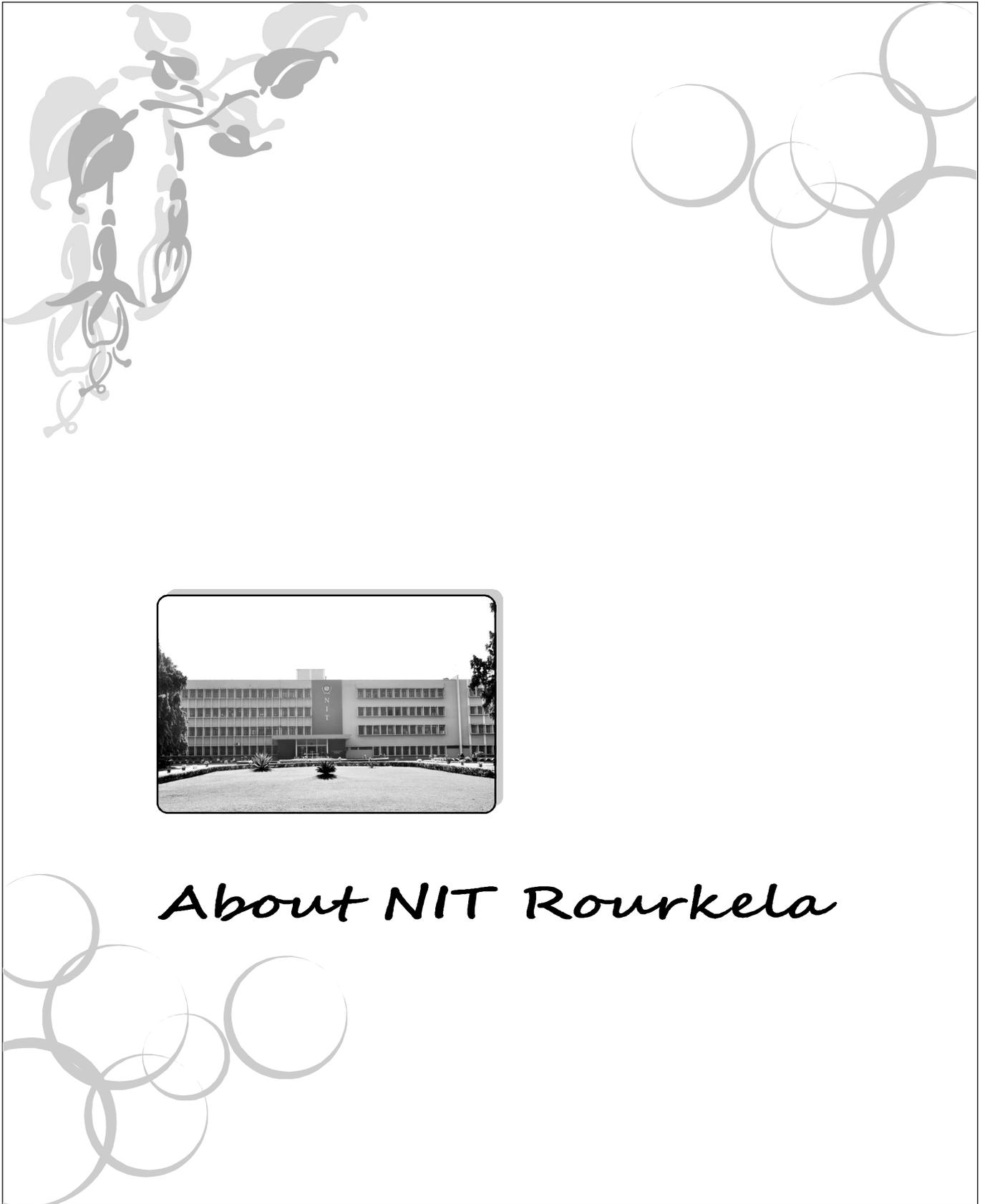
Physics : Nisha Kumari Singh

## ENDOWMENT MEDALS

### MEDALS

<b>Saurav Ranjan Kar Memorial Medal</b> Best Graduate of the Institute	: Tithy Sahu
<b>Pranab Memorial Medal</b> Best Graduate of Mechanical Engineering	: Anurag Singh
<b>Sugat Kishore Mall Memorial Medal</b> Best Graduate of Electrical Engineering	: G Bhargavi
<b>Prof. Ashok Kumar Mohanty Medal</b> Best All-rounder of Metallurgical & Materials Engineering	: Nachiketa Mohanty
<b>Bhaswati Paul Memorial Medal</b> Best Project on Environment Pollution	: Roma Sinha
<b>Shanta Jain Prize</b> Best product oriented project	: Amit Arup Nayak

Colour Page  
Alumni



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### **Sri B. S. Sudhir Chandra**

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### **Prof. Sunil Kr Sarangi**

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### **Mrs. Amita Sharma, IAS**

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### **Dr. R. K. Bhandari**

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### **Prof. (Mrs.) Rintu Banerjee**

Professor  
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277073®, 281328(L)  
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Fax : 03222-255303  
E-mail : rin\_tuin@yahoo.com/  
rb@agfe.iitkgp.ernet.in

### **Shri R. K. Behera**

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Mobile : 09822014237

### **Shri Jadhav Sachin Ramchand, IAS**

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### **Prof. R. K. Sahoo**

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N.I.T., Rourkela.  
Tel : 0661-2462652(O), 2463652(R)  
Mobile : 09437245438  
E-mail : rkpatel@nitrkl.ac.in

### **Er. S. K. Upadhyay**

Registrar & Secretary, BOG  
National Institute of Technology  
Rourkela - 769 008 (Odisha)  
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Institute of Life Sciences, Bhubaneswar  
M: 9937689286
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Hyderabad -500 032
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	<b>From</b>	<b>To</b>
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3. Shri Sadashiva Tripathy, Chief Minister, Govt. of Orissa	14-04-1965	07-03-1967
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7. Shri Kanhu Charan Lenka, Ministry of Industries, Govt. of Orissa	14-01-1977	30-04-1977
8. Shri Harish Chandra Bauxipatra, Ministry of Industries, Mining, Geology & Rural Department, Govt. of Orissa	06-07-1977	18-02-1980
9. Shri Kishore Chandra Patel, Ministry of states for Industries, Govt. of Orissa	12-08-1980	08-03-1985
10. Shri S.B. Mishra, IAS, Commissioner-cum-Secretary, Industries Dept., Govt. of Orissa	06-06-1985	03-01-1986
11. Shri Jadunath Das Mohapatra, Ministry of Education & Youth Services, Govt. of Orissa	04-01-1986	29-10-1986
12. Shri Niranjan Patnaik, Ministry of Industries, Science, Technology & Environment, Govt. of Orissa	30-10-1986	16-11-1989
13. Shri S. B. Mishra, IAS, Secretary, Industries Dept., Govt. of Orissa	17-11-1989	12-08-1990
14. Shri Dillip Ray, Ministry of Industries, Govt. of Orissa	13-08-1990	03-05-1996
15. Shri Niranjan Patnaik, Ministry of Industries, Govt. of Orissa	04-05-1996	22-07-1999
16. Dr. Giridhar Gomang, Chief Minister, Govt. of Orissa	23-07-1999	10-03-2000
17. Shri Kanak Vardhan SinghDeo, Ministry of Industries, Govt. of Orissa	11-03-2000	25-06-2002

**NATIONAL INSTITUTE OF TECHNOLOGY, ROURKELA**

	<b>From</b>	<b>To</b>
1. Shri Kanak Vardhan Singh Deo Ministry of Industries & Public Enterprise, Govt. of Orissa	26-06-2002	01-09-2002
2. Dr. Bansidhar Panda Chairman & Managing Director, IMFA Group of Industries, Bhubaneswar	02-09-2002	16-12-2007
3. Shri Drona Rath CMD, MECON LIMITED	17-12-2007	16.12.2010
4. Shri B. S. Sudhir Chandra Director (Project & Planning), Bangalore Metro Rail Corporation Ltd.	01.03.2011	Continuing

**SUCCESSIVE LIST OF PRINCIPALS  
REGIONAL ENGINEERING COLLEGE, ROURKELA**

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2	Prof. Bhubaneswar Behera	12-02-1962	19-07-1971
3	Prof. H. S. Nagabhushanaiah	20-07-1971	30-08-1972
4	Prof. R. Mishra	31-08-1972	30-08-1973
5	Prof. H. S. Nagabhushanaiah	31-08-1973	16-10-1974
6	Prof. Somnath Mishra	17-10-1974	31-01-1996
7	Prof. Ashok Kumar Mohanty	01-02-1996	30-09-2001
8	Prof. Gopendra Kishore Roy	01-10-2001	25-06-2002

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5	Prof. Prafulla Chandra Panda	03.11.2010	24.05.2011
6	Prof. Sunil Kumar Sarangi	25.05.2011	Continuing

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### CORE COMMITTEE

**Prof. S. K. Sarangi**, Director

<b>Prof. S. K. Patra</b> , Dean (FW) <b>Prof. S. K. Sahu</b> , Dean (PD) <b>Prof. K. K. Mohapatra</b> , Dean (AR) <b>Prof. K. C. Pati</b> , Chief Warden	<b>Prof. S. Bhattacharyya</b> , Dean (AA) <b>Prof. Mahavir Panda</b> , Dean (SR) <b>Prof. K. C. Biswal</b> , Dean (SW) <b>Er. S. K. Upadhyay</b> , Registrar
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**Prof. S. Panigrahi**  
PIC, Convocation-Convener

### DIFFERENT WORKING COMMITTEES

Committee	Convener	Members
Certificate and Award	Prof. S. Bhattacharyya, Dean (AA)	Sri B. Acharya, AR (AC), Sri S. N. Biswal, (AC), Mrs. P. Das, (AC), Sri T. K. Sarangi, (AC), Sri B. M. Das (AC), Mrs. A. Acharya, (AC), Sri D. K. Nayak (AC), Sri H. Mohapatra, (AC)
Medals	Prof. S. K. Jena, Dean (RC)	Prof. C. K. Biswas (ME), Prof. Kunal Pal (BM), Sri K. P. Panigrahi [AR (IA)], Sri Raman [AR(F&A)]
Publications	Prof. A. V. Asha (CE)	Prof. A. K. Rath (HS), Prof. B. B. Nayak (CR), Prof. Arup Das (ME)
Convocation Dress	Prof. S. C. Mohanty (ME)	Prof. U. K. Mishra (CE), Prof. N. Panda (CY), Sri F. C. Chhatoi (AC)
Campus Environment	Prof. B. B. Verma (MM)	Prof. K. K. Khatua (CE), Sri S. P. Mohapatra, AEE (EM), Sri B. Champati Ray (SO)
Website & Internet	Prof. B. Majhi (CS)	Prof. B. D. Sahoo (CS), Prof. D. P. Mohapatra (CS), Sri D. K. Barik (CC), Sri Manas Pattnaik (CC)
Venue Preparation & Sitting Arrangements	Prof. H. B. Sahoo (MN)	Mrs. Simantini Behera (CE), Prof. Md. Rajik Khan (ID), Prof. Y. K. Sahu (EE), Sri S. P. Mohapatra AAE (EM), Sri P. K. Sahoo JE (E)
Lunch	Prof. S. K. Acharya (ME)	Prof. A. Kumar (MA), Prof. R. K. Behera (ME), Dr. P. K. Rout (SAS), Prof. Surajit Das (LS)
Arrangement for Degree Awards	Prof. S. K. Paria (CH)	Prof. P. K. Sa (CS), Prof. D. Behera (PH), Prof. H. M. Jena (CH) Prof. P. N. Vishwakarma (PH)
Academic Procession	Prof. R. Jha (CE)	Prof. D. P. Tripathy (MN), Sri R. R. Nayak, TA (PH)
Hospitality, Invitation & Accommodation	Prof. R. K. Patel (CY)	Prof. Pawan Kumar (PH), Sri B. Mondal (ES) Sri K. K. Sahu (AR), Sri Samir Mohanty
Audio/Photography	Prof. Dipti Patra (EE)	Prof. S. Samanta (EE), Sri M. Mohanta, TA (EE)
Arrangements for VIPs & Invitation of outside guests	Er. S. K. Upadhyay (Reg)	Sri Sudhin Babu (AR)
Evening Function	Prof. K. K. Mohapatra (EC)	Prof. S. Chinara (CS), Prof. D. K. Pradhan (PH), Prof. A. Basu (MM), Sri N. N. Nayak, Sri A. Babu (AR), Sri T. K. Sarangi (AC)
Security	Er. S. K. Upadhyay (Reg)	Sri B. Champati Ray (SO)
Transport	Prof. S. Murugan (ME)	Mrs. K. K. Sahu (AR), Sri G. C. Nayak (TS), Sri B. Champati Ray (SO)
Telephone	Prof. S. K. Behera (EC)	Mrs. K. P. Das Mohapatra (TE)
Press	Prof. B. B. Biswal	Sri R. K. Sinha (SR), Sri B.N. Sahoo (Director's Office)

## PREVIOUS CONVOCATIONS

<u>Convocation</u>	<u>Date</u>	<u>Chief Guest</u>
Annual Convocation – I	April 12, 2004	Prof. R. Natarajan
Annual Convocation – II	December 11, 2004	Dr. Anil Kakodkar
Annual Convocation – III	January 28, 2006	Prof. Chandrasekhar Jha
Annual Convocation – IV	December 16, 2006	Mr. Subrato Bagchi
Annual Convocation – V	January 12, 2008	Dr. K. Radhakrishnan
Annual Convocation – VI	January 17, 2009	Dr. K. Kasturirangan
Annual Convocation – VII	January 16, 2010	Dr. A.P.J. Abdul Kalam
Annual Convocation - VIII	January 15, 2011	Mr. Partha S. Bhattacharyya
Annual Convocation - IX	January 21, 2012	Mr. Chandra Shekhar Verma