

Patron:

Prof. K Umamaheshwar Rao
Director (NIT Rourkela)

Co-Patron:

Prof. Santanu Paria
Dean (SRICCE)

Chairman:

Prof. SK Sahoo, Head of the Department
Department of Mechanical Engineering

Coordinator:

Dr. Kaustav Chaudhury
Assistant Professor
Department of Mechanical Engineering
Email: chauduryk@nitrkl.ac.in

Co-Coordination:

Dr. Tarapada Roy
Associate Professor
Department of Mechanical Engineering
Email: tarapada@nitrkl.ac.in

Dr. Saurav Datta
Associate Professor
Department of Mechanical Engineering
Email: sdatta@nitrkl.ac.in

Dr. Haraprasad Roy
Associate Professor
Department of Mechanical Engineering
Email: hroy@nitrkl.ac.in



ABOUT US

The erstwhile **Regional Engineering College (REC) Rourkela** was converted to a deemed university and renamed as **National Institute of Technology, Rourkela** on 26th June, 2002. It was declared as **An Institution of National Importance** through the parliament act on 15th August 2007. The institute has made a rapid stride in earning a reputation as a place of higher learning in the field of engineering as well as technology during the last decade. NIT Rourkela provides quality education in a diverse and multi-cultural environment. The mission of the institute is to meet the needs of the industry and commerce by providing human resource with the required knowledge and skill and also by promoting, dissemination, developing and transferring technology. The institute strives hard 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 as well as post graduate students along with advanced research.



The **Mechanical Engineering Department** of NIT, Rourkela is known for research in diverse fields. The main foci of research are on mechanical vibration, robotics, CAD/CAM, precision engineering, metal forming, Machining, CFD, Industrial refrigeration and Cryogenics. The academic programme of the department reflects not only the core areas of Mechanical Engineer but also the research specialization of the faculty. The department at present has over one hundred research scholars pursuing projects on diverse fields. The faculty is organized under three divisions and six groups. All the groups are working in close co-operation while retaining individual identities. Many Research and Development projects being pursued by the faculty are sponsored by Government agencies and private industries. Some of the major sponsors are BRNS, DST, DAE, CSIR, DRDO, BARC, ISRO and private industries.

Workshop On

Realizing Key-Enablers to Achieve the 21st Century Vision in Academies:
In the Context of Indian Technical Institutions
(RKE-21CVA 2023)
(VIRTUAL MODE)

During

8th July – 12th July, 2023

Coordinator

Dr. Kaustav Chaudhury
Assistant Professor
Department of Mechanical Engineering
Email: chauduryk@nitrkl.ac.in

Co-Coordination

Dr. Tarapada Roy
Associate Professor
Department of Mechanical Engineering
Email: tarapada@nitrkl.ac.in

Dr. Saurav Datta
Associate Professor
Department of Mechanical Engineering
Email: sdatta@nitrkl.ac.in

Dr. Haraprasad Roy
Associate Professor
Department of Mechanical Engineering
Email: hroy@nitrkl.ac.in

Being organized by



Department of Mechanical Engineering
National Institute of Technology
Rourkela, Odisha-769008
www.nitrkl.ac.in

RESOURCE PERSONS

Academicians from premier institutions like IITs, NITs, State/ Centrally Funded Universities, experts from R&D Organizations having expertise and experience in relevant domain knowledge are to be invited as *Resource Person* for this workshop.

OBJECTIVES

The objective of the workshop is to create awareness on entire philosophies and aspects of implementation of the National Education Policy (NEP 2020) in the context of technical institutions throughout the nation. NEP 2020 considers active participation of various stakeholders (students, teachers, parents and industries) which aims to create an outcome based education process satisfying current market-needs and thus enabling graduates to face the highly competitive Global world. NEP 2020 focuses on transforming India sustainably into an equitable and vibrant knowledge society, by providing high-quality education to all, and thereby making India a global knowledge superpower.

To achieve this milestone, it is indeed necessary that quality and improvement of institutes are assessed continuously. Accreditation and ranking are two important indicators of quality and goodwill of an institute. Accreditation is an appraisal process that the institution or the programme continues to meet and/or exceed the Norms and Standards prescribed by regulator from time to time. It is a framework for recognition which indicates that a programme or institution fulfills certain standard.

The National Board of Accreditation (NBA) is to promote and recognize excellence in technical education in colleges and universities - at both the undergraduate and post graduate levels. Institutions, students, employers, and the public at large all benefit from the external verification of quality provided through the NBA accreditation process. They also benefit from the process of continuous quality improvement that is encouraged by the NBA's developmental approach to promote excellence in technical education. All stakeholders' participation is required for an institute to be accredited. The method of evaluation needs to be precisely known to all stakeholders.

National Institutional Ranking Framework (NIRF) is a methodology adopted by the MoE, Govt. of India, to rank institutions of higher education in India. NIRF framework explores several parameters for ranking purposes such as resources, research, and stakeholder perception. The workshop will focus on the detailed ranking procedure and highlight how institutes can secure a better standing under this evaluation framework.

Apart from NIRF, Quacquarelli Symonds (QS) World University Ranking as well as Times Higher Education (THE) ranking, etc. reflect extent of popularity and performance of universities worldwide. There are numerous benefits upon acquiring a good ranking of the institute.

Quality publication, sponsored research/ consultancy, technology incubation, etc. are vital areas to focus of the institutions in the current scenario. India is now on the path towards 'MAKE IN INDIA' mission to really make it happen in practice. In order to achieve excellence in an education process, adequate knowledge on dissemination management is very important. Scholars must be motivated and properly trained for scientific research paper writing, quality publication, selection of an appropriate journal for paper communication and understanding of publishers' purview. To advocate sponsored research; information on various funding opportunities within the nation and abroad is required.

This workshop intends to share information on Intellectual Property Rights (IPR) including patent filing, copyright and trademark to achieve various goals and milestones of the institutes. Scholars should be well-aware of various platforms (such as ORCID, Web of Science, Clarivate Analytics, Google Scholar, Research Gate, LinkedIn, Scopus, Publons) for recognition of academic excellence as well as showcase their scholastic achievements. The information to be shared and discussed in the workshop will certainly help scholars as well as faculty members to nurture and establish their academic potential in a broader domain.

COVERAGE/ FOCUS AREA

The workshop will cover but is not limited to the following topics:

NATIONAL EDUCATION POLICY 2020

Sustainable higher education; NEP 2020: Quality Universities and Colleges: A New and Forward-looking Vision for India's Higher Education System; Institutional Restructuring and Consolidation; Towards a More Holistic and Multidisciplinary Education; Optimal Learning Environments and Support for Students; Motivated, Energized and Capable Faculty; Equity and Inclusion in Higher Education; Teacher Education; Re-imagining Vocational Education; Catalyzing Quality Academic Research in all Fields through a New National Research Foundation; Transforming the Regulatory System of Higher Education; Effective Governance and Leadership for Higher Education Institutions; Other key areas and aspects of implementation

ACCREDITATION

The National Board of Accreditation (NBA), Assessment and evaluation in an outcome based education process; Direct and indirect system of Assessment and Evaluation for tier I and II institutes; Mapping of Course Outcomes (Cos) and Programme Outcomes (Cos), Difference between Programme Outcomes (POs) and Specific Programme Outcomes (SPOs), rubric method of teaching and evaluation; need for curriculum change based on POs; evaluation criteria for NBA accreditation

RANKING OF TECHNICAL INSTITUTIONS

The National Institutional Ranking Framework (NIRF); Understanding on parameters and sub-parameters; Teaching, Learning and Resources (TLR); Research and Professional Practices (RP); Graduation Outcomes (GO); Outreach and Inclusivity (OI); Peer Perception (PR)

Quacquarelli Symonds (QS) World University Ranking by TopUniversities.com; measurement of popularity and performance of universities throughout the Globe; Understanding of parameters: Academic reputation, Employer reputation, Research citations, H-index, Global Research Network, Weightings

Times Higher Education (THE) ranking; Understanding of evaluation criteria: Teaching, Research, International Outlook, Industry Income

Platforms For Recognition of Academic Excellence: ORCID, Web of Science, Clarivate Analytics, Google Scholar, Research Gate, LinkedIn, Scopus, Publons

Dissemination management: Thesis and scientific research paper writing: publishers' point of view, stress management among students

Funding opportunities for sponsored projects and consultancy

Intellectual Property Rights (IPR): patent filing, copyright and trademark

IMPORTANT GUIDELINES

Faculty members of various academic institutions, Research scholars, PG students, etc. are eligible to apply for the workshop.

Registration Fee (Including GST):

Faculty members: Rs. 1000/-

Research scholars and UG/ PG students: Rs. 500/-

Interested participants are required to send the scan copy of the Registration Form through e-mail. Online payment should be **made in favor of:**

Account Name: **CONTINUING EDUCATION NIT ROURKELA**

Payable Bank and branch: SBI, NIT Campus, Rourkela-769008

Account No.: **10138951784**

IFSC Code: SBIN0002109

Last date of registration: **1st July 2023**

Registration Form can also be downloaded from the institute website.

The workshop will be conducted through online mode (*google-meet/ Ms-Team*). Programme schedule and *joining link* of the same will be shared in due course. E-certificate will be issued to the registered participants after completion of the workshop.

There is no registration fee for the participants

CONTACT DETAILS

For any queries regarding this programme, please contact:

Dr. KAUSTAV CHAUDHURY

The Coordinator (**RKE-21CVA 2023**)

Department of Mechanical Engineering

(New Mechanical Science Building)

National Institute of Technology

Rourkela, Odisha-769008

Email: chauduryk@nitrkl.ac.in

Ph.: +91 661 246 2535 (Office)

+91-8530897399 (Mobile)

Workshop

On

**Realizing Key-Enablers to Achieve the 21st Century Vision in Academies:
In the Context of Indian Technical Institutions
(RKE-21CVA 2023)**

During

8th July - 12th July 2023

**Department of Mechanical Engineering
National Institute of Technology
Rourkela, Odisha-769008**

Registration Form

NAME (Block Letter) _____

Designation _____ Department _____

Organization _____

Mail Address _____

Mobile No _____ Email _____

PAYMENT DETAILS

Transaction Reference No _____ Date _____

Bank/ Branch _____

Bank Address _____

Signature

Date

Send the scan copy of the Registration Form along with proof of online payment to **Dr. Kaustav Chaudhury** (chaudhuryk@nitrkl.ac.in), Coordinator (**RKE-21CVA 2023**), Department of Mechanical Engineering, NIT Rourkela-769008 (Odisha)