





Dr. Ajit Kumar Sinha Vice-Chancellor

Vice-Chancellor's Desk

Industrial Revolution 4.0 and Higher Education

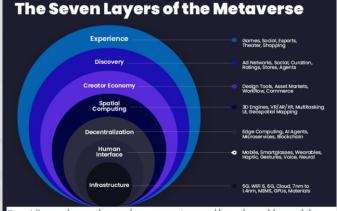
On 19th July 2024, Microsoft experienced a global outage that affected many Windows users with the "Blue Screen of Death" (BSOD). American cyber security company Crowd Strike distributed a faulty update to its Falcon Sensor security software that caused widespread problems with Microsoft Windows computers running the software. In other way if I say you only hurt the ones you love. Perhaps that happened on 19th July. To my understanding the intentions were not bad. But it put whole of the world on hold.

We are at fourth industrial revolution or Industry 4.0, which is a neologism. Neologism is a term, which was first used in year 2016 by Klaus Schwab (German strategist) to describe rapid technological advancements. He asserted that these technological advancements leading to developments is a significant shift towards industrial capitalism. This phase will see the joining of artificial intelligence, gene editing to advance robotics that will blur the lines between the physical, digital, and biological worlds. We are fast forwarding towards using modern smart technology, large-scale machine-to-machine (M2M)communication and the internet of things (IoT). This is representing a social, political, and economic shift from the digital age of the late 1990s and early 2000s to an era of embedded connectivity distinguished by the ubiquity of technology in society which is changing the ways humans experience and know the world around them. We are creating a metaverse - the metaverse is a virtual world that combines physical and virtual

space, and is enabled by immersive technologies like virtual reality (VR), augmented reality (AR), and mixed reality.

If we look at the figure 1, shift in human learning, knowledge and behavior is imperative. Education Policy 2020 has major focus on use of technology in higher education. There is a continuum of learning education and knowledge. Therefore, the future education will be by the technology and for the advancement of technology for the betterment of human being as a whole and protecting the mother earth simultaneously.

Therefore, the universities, other than the technological institute have a challenge to cope with the changing landscape of education. They will have to design and develop their curriculum in such a way that it should align with the emerging fields of technology as Klaus Schwab says that



the fourth era technologies will combine hardware, software, and biology and will create cyber-physical system. Therefore a paradigm shift in curriculum is inevitable and will have to shift to a new order of teaching-leaning process too that will align with the future scope of robotics, artificial intelligence, nanotechnology, quantum computing, biotechnology, internet of things, the industrial internet of things 3D printing fully automated vehicles etc.

Editorial by Director, IQAC

Greetings from the IQAC of Ranchi University!

We are delighted to present the second volume of "Perspective," coinciding with the auspicious occasion of Independence Day, 15th August 2024. This edition highlights the outstanding efforts and achievements of the IQAC over the past month, demonstrating our unwavering commitment to enhancing the academic and administrative standards of our esteemed institution.



Prof. Sudesh Kumar Sahu
Editor-in-Chief and IQAC, Director
Ranchi University, Ranchi

In July, the IQAC successfully organized a series of impactful events and workshops. These initiatives focused on innovative teaching methodologies, research advancements, and skill development, catering to the diverse interests and needs of students, faculty, and staff. The enthusiastic participation and positive feedback from attendees reflect the value and relevance of these programs. The collaborative efforts between various departments have fostered interdisciplinary learning, leading to a more integrated and holistic approach to education.

Our continuous assessment and feedback mechanisms have been further strengthened, ensuring that the quality of education at Ranchi University remains top-notch. The IQAC's dedicated team has worked tirelessly to streamline processes, address challenges, and implement best practices across the board. These efforts have not only improved the efficiency of our operations but also enhanced the overall academic experience for our university community.

As we celebrate our nation's independence, we also reflect on the academic freedom and opportunities that Ranchi University offers. We are committed to fostering an environment where creativity, critical thinking, and innovation can flourish. The progress we have made in the past month is a clear indicator of the collective effort and dedication of our university community.

We extend our heartfelt gratitude to all faculty members, students, and administrative staff for their unwavering support and active participation in IQAC initiatives. Your commitment to excellence continues to inspire us and drives our mission forward. We are excited about the upcoming projects and events that will further enhance the quality and reach of our educational programs.

As you delve into this edition of "Perspective," we invite you to join us in celebrating our achievements and milestones. Together, we will continue to strive for excellence and make Ranchi University a beacon of quality education.

Wishing everyone a joyous Independence Day!

RANCHI UNIVERSITY, RANCHI PERSPECTIVE NEWSLETTER, IQAC

News, Activities and Achievements

- ### 4th April 2024- Dr Ajit Kumar Sinha, Vice Chancellor, along with Dr B K Sinha, Technical Officer to VC RU visited IIT ISM and had a meeting with the Director, IIT ISM and explored the possibilities of entering an MoU and subsequently hand holding of Ranchi University, Ranchi in establishment of Research Park to facilitate skill development and employability to students at Ranchi University, Ranchi.
- Cultural fest- Shodhansurawi- A cultural fest for the Research Scholars and by the Research Scholars of Ranchi University. First of its kind a cultural fest was celebrated on 08th July 2024. The programme was organized by the IQAC RU by the Registred Research Scholars UGC/CSIR JRF/SRF and University PhD Scholars followed by Dinner to all the participants along with their mentor.





- 12th July 2024- Ranchi University signed an MoU with BIT, Mesra onits 64th Establishment Day. The two Vice Chancellors Prof Indranil Manna, Vice Chancellor, BIT Mesra and his team and Dr Ajit Kumar Sinha, Vice Chancellor Ranchi University, Ranchi with his team observed the MoU signing ceremony followed by a colourful cultural programme. Shri Sanjay Seth, Union Minister of State in the Ministry of Defence also grace the occasion. MoU will facilitate multi-institutional, multidisciplinary collaborative research at both the institutions.
- ✓ Visit to IIT Madras- A team comprising of Dr B K Sinha, Technical Officer to VC RU and Dr N K Rana, Asst. Prof Department of Physics, J N College, Dhurwa, visited IIT Madras on 18th and 19th July 2024 to explore possibilities of signing memorandum of understanding between the two organisationsto give new dimension to innovation, incubation and startup programmes at Ranchi University. The mission was successful and IITMadras Parvartak has extended their had to handhold Ranchi University Ranchi in establishment of a Research Park. Correspondences are under progress and soon the two organizations will sign MoU.





- Ranchi University IQAC has set Academic Benchmarks for its next academic session in the IQAC meeting held on 27th July 2024.









Central Library, Ranchi University started a programme to train all the registered Research Scholars of Ranchi University on uses of e-Journals and e-resources available non line DELNET, Shodh Chakra, INFLIBNET etc.

Ranchi University has pre-qualified for 2nd cycle of NAAC accreditation as communicated by NAAC Bangalore.

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Upcoming Plan of Action

Looking ahead, our primary focus will be preparing for the NAÁC peer team visit. A comprehensive plan has been formulated in the recent IQAC meeting to ensure that each university department is well-prepared and presents itself excellently. Our goal is to assist and guide departments in showcasing their strengths and achievements effectively.

Here are our key upcoming plans:

1. NAAC Peer Team Visit Preparation:

- Ensure every department is well-prepared for the visit.
- -Assist departments in presenting their strengths and achievements.
- Make each university department look excellent.

2. Six-Day Workshop on E-Content Development:

- Conduct a comprehensive workshop for faculty members.
- Enhance digital teaching skills.
- Enable faculty to create engaging and effective e-learning materials.



PATRON

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