

THE QUARTERLY NEWSLETTER OF NIT RAIPUR



Volume 7 - Issue I

Mirror

Reflecting the True Spirit of NIT Raipur



1st April 2024



mirror@nitrr.ac.in



[@nit_raipur](https://www.instagram.com/nit_raipur)



[@nitrr.raipur](https://www.facebook.com/nitrr.raipur)



[@NITRR](https://www.twitter.com/NITRR)



www.nitrr.ac.in/newsletter.php

QUARTERLY GLIMPSES

Eclectika'24

Republic Day 2024



CYSC 2023-24



Samar 2024



IN THIS ISSUE

CONTENTS

| | |
|---------------------------------|----|
| Institute News | 05 |
| Academic Activities | 11 |
| Research Frontier | 17 |
| Students' Corner | 19 |
| Club/Committee Activities | 20 |
| Contribution to the Institution | 26 |

2 EXEMPLARY STUDENTS' ACHIEVEMENTS

2 MERITORIOUS STUDENTS WITH NOTEWORTHY PLACEMENTS

8 GATE TOPPERS



13 CAPTIVATING CLUB EVENTS

3 EUPHORIOUS MEGA EVENTS

2 NATIONAL CONFERENCES

6 INTERNATIONAL CONFERENCES

1 SHORT TERM TRAINING PROGRAMS

5 EXPERT LECTURES

5 EXPERT LECTURES

24 PhD THESIS DEFENDED

1 PATENT GRANTED

2 WORKSHOPS

3 BOOKS PUBLISHED

3 MoUs

1 MoA

NIT RAIPUR IN MEDIA

माइक्रोसॉफ्ट से एनआईटी के 5 छात्रों को 55-55 लाख का ऑफर

एनआईटी में वीर बाल दिवस पर दिखाई गई लघु फिल्म

NIT Raipur organises eye care camp

इक्लेक्टिका में बिखरे कई रंग

विज्ञान के नए आयामों को छूने में यंग साइंटिस्टों का हाथ : डॉ. राव

NIT's workshop on 'A holistic approach towards women empowerment' held

NIT Raipur, Central Road Research Institute sign MoU for institutional collaboration

Innovation conclave 'Avinya' organised at NIT Raipur

■ Staff Reporter RAIPUR, Feb 11
INNOVATION Cell (I-Cell) of National Institute of Technology (NIT) Raipur



sharing insights on the government's efforts to promote the startup culture. Dr Saazab's Gupta concluded the inaugural ceremony of 'Avinya' by extending best determination, cautioning individuals to be mindful of what they consume mentally. He advised against chasing perfection, suggesting instead to focus on progress and growth.

नवभारत Rajdhani - 12 Feb 2024 - 12 raj 5
epaper.navabharat.news
एनआईटी रायपुर के छात्रों को एडोबी में मिला प्लेसमेंट

TheHitavada

Raipur City Line | 2024-01-15 | Page-4
ehitavada.com

NIT holds symposium on future of AI under Viksit Bharat mission

नवभारत Rajdhani - 12 Feb 2024 - 12 raj 5
epaper.navabharat.news

एनआईटी रायपुर के छात्रों को एडोबी में मिला प्लेसमेंट

NIT Raipur and BIS signs MoU for Institutional Collaboration

Raipur, Jan 24: In a significant move towards knowledge sharing and enhancing research opportunities, the National Institute of Technology (NIT) Raipur and BIS Kolkata with the aim of exploring enhanced opportunities for both the stakeholders. By leveraging the expertise of both the institutions, a Disclosure Agreement (NDA) ensuring the protection of generated intellectual property. The agreement is valid initially for 3 years and may be extended by the mutual consent of both the



अचीवमेंट टाइम: एनआईटी के छात्रों को एमएनसी में मिला प्री प्लेसमेंट
5 छात्रों को 36.6 लाख सालाना पैकेज

#AchievementTime मल्टीनेशनल कंपनी ने किया हायर
एनआईटी के प्रथम को 62 और आर्यन को 52 लाख सालाना की जॉब ऑफर

NIT Raipur ties-up with Ministry of Jal Shakti, IIT Kanpur as Lead Consortium Institute

ehitavada.com

NIT celebrates Youth Day

एनआईटी और सिपेट चेन्नई के बीच तीन वर्षों के लिए एमओयू

ढोल-बाजों संग नाचते-गाते पहुंचे एनआईटी छात्र

1963, 1973, 1988 और 1998 बैच के छात्र हुए सम्मिलित

TheHitavada

Raipur City Line | 2024-03-18 | Page-7
ehitavada.com

NIT Raipur holds voter awareness campaign

NIT Raipur inaugurated The Annual Sports Fest SAMAR

Raipur, Jan 18: National Institute Of Technology (NIT) Raipur's sports com-



TheHitavada

Raipur City Line | 2024-03-15 | Page-8
ehitavada.com

NIT organises lecture series on semiconductor technology

TheHitavada

Raipur City Line | 2024-02-06 | Page-4
ehitavada.com

NIT Raipur organises Cancer Awareness Initiative seminar

■ Staff Reporter Raipur and Dr. Deepika Aggarwal, Oncologist, NITEN, Raipur Dr. Anil Aggarwal, explained, said Bhagwanpur, Raipur Dr. Teacher and Kadung, Raipur

NIT embraces future needs of urban planning professionals for policymaking

■ Urban Planning, a must to develop cities for the future
■ NIT is first central government institution to offer this course in Chhattisgarh. The M Tech programme in Urban Planning is set to commence for 20 seats in the

Master of Technology (MTech) programme in Urban Planning at the Department of Architecture, now known as the Department of Architecture and Urban Planning, will cover a wide range of topics including urban design, transportation planning, environmental planning, housing and infrastructure. Its curriculum will cover a wide range of topics including urban design, transportation planning, environmental planning, housing and infrastructure. Speaking about the new programme, Head of the Department Dr. Abhir Sandhyopadhyay expressed excitement about the opportunity to offer this course in Chhattisgarh. The M Tech programme in Urban Planning is set to commence for 20 seats in the

75th Republic Day Celebration



NIT Raipur celebrated the 75th Republic Day of the Nation on 26th Jan. 2024. The event commenced with the esteemed **Dr. N.V. Ramana Rao**, *Director, NIT Raipur*, unfurled the national flag, followed by the national anthem and a parade led by NCC cadets. Addressing the assembly, **Dr. N. V. Ramana Rao** conveyed his heartfelt wishes to everyone. Emphasizing the Institute's unwavering commitment to national service, he outlined the remarkable strides taken in national and international conferences, and noteworthy achievements such as patents and publications. This was followed by the Plantation drive conducted by **Go Green – The Eco Social Committee** at the Institute's garden walkway, supported by the Government of Chhattisgarh with over 250 complimentary herb plants. **Dr. N. V. Ramana Rao**, along with his wife **Mrs. Jyothi Ramana Rao**, deans, faculty members, and dignitaries graced the event. The day's festivities also included the release of the Institute's annual calendar, dance performances, patriotic song performances by **Raaga- The Music Club**, and drama by **Abhinay- The Dramatics Club**. **Team Sanskriti- The Cultural Committee** presented a thought-provoking documentary, adding depth to the celebration. Overall, the celebration proved to be a vibrant event, encompassing patriotism, environmental consciousness, and cultural enrichment. The collective efforts of students, faculty members, and staff showcased the Institute's dedication to shaping well-rounded individuals equipped to contribute meaningfully to the nation and the world.

On the occasion of Republic Day, **Team Unnat Bharat Abhiyan (UBA)**, NIT Raipur organized a memorable village visit to the Government School in Nardaha village in Arang, Raipur, on 26th Jan. 2024 under the guidance of **Prof. Dr. Sudhakar Pandey**, *Regional In-charge, UBA*, **Dr. Harendra Bikrol**, *PI Coordinator, UBA* and **Dr. Suwendu Rup**, *Committee Member, UBA*. The campaign started with the unfurling of the national flag, resonating with the essence of freedom and unity. Students actively participated in various activities, including cultural performances, awareness rally,

and donation of books to the school. This initiative aimed to foster a sense of responsibility towards rural development and education. The campaign demonstrated the power of collective efforts in building a stronger and united India.

19th Chhattisgarh Young Scientist Congress 2024



NIT Raipur and Chhattisgarh Council of Science and Technology (CCOST) jointly organized the 19th Chhattisgarh Young Scientist Congress (CYSC) 2024 on 26th Feb. 2024. The event was organized under the patronage and guidance of **Dr. N.V. Ramana Rao**, *Director, NIT Raipur* and **Shri S.S. Bajaj**, *Director General, CCOST*. The conveners of this event were **Dr. Dilip Singh Sisodia** and **Dr. Rakesh Tripathi**, *NIT Raipur*, and **Dr. (Mrs.) J. K. Rai**, *CCOST*. The grandiose event was organized to commemorate the discovery of the **Raman Effect** by Indian physicist **C.V. Raman**. It provided a platform for budding scientists to showcase their contributions, share innovative ideas, and engage in meaningful discussions with experts and peers, fostering networking and collaboration within the scientific community. More than 300 Research Papers were registered in 2023-24 session, with 207 Research Papers shortlisted for presentation. The event was inaugurated by Chief Guest **Dr. P. K. Sinha**, *Director, IIIT Naya Raipur* and Special Guest **Dr. Purnendu Saxena**, *Orthopedic Surgeon and Director, VY Hospital*. **Dr. M. K. Verma**, *Vice Chancellor, CSVTU Bhilai* was also present as a Distinguished Guest during the event. **Dr. Rao** emphasized the importance of innovation in addressing climate change and highlighted the government's commitment to education, society, and research. He also pledged to advance the state of Chhattisgarh on the path of science and technology, ensuring its progress and prosperity. **Shri S. S. Bajaj** advocated for the patenting of new innovations, highlighting the importance of fostering a culture of innovation. He also shed light on the National Children's Science Congress, which aims to nurture scientific temperament among young minds aged 10 to 17 years by showcasing their talent at the central level. **Dr. P. K. Sinha** encapsulated the essence of collective action towards a brighter future and emphasized the importance of having a national vision under **Viksit Bharat@2047** that unites all citizens towards a common goal. He presented the innovation brought by IIIT Naya Raipur in making a portal with CCOST

to search for available research equipment throughout different universities. **Dr. Purnendu Saxena** delved into the rapid evolution of the world, particularly in the field of research and shed light on the demographic shifts and challenges that accompany such advancements, including population growth and the imperative role of scientists and innovation. He discussed the intricate workings of neurotransmitters like oxytocin and dopamine, emphasizing their influence on societal dynamics and elucidated the dichotomy wherein regions with sparse populations gravitate towards robotics and AI, while densely populated areas rely on industries and human capital. In the ongoing presentations at the campus, **Tukendra Kumar's** Biotech paper unveiled a **Microbial Fuel Cell based Biosensor, offering self-sustainable pollutant detection in wastewater**. The innovation not only detects pollutants but also treats wastewater while generating electricity, ideal for remote regions. His breakthrough promises eco-friendly solutions and sustainable energy practices, marking a significant scientific advancement. **Aditya Thakur's** Research presentation focused on the study of adsorption and desorption time for **Thermal compressors promoting green energy, reducing global warming and ozone layer depletion**. His eco-friendly approach underscored the significance of sustainable solutions, advocating for a greener future. The session concluded on 27th Feb. 2024, in the presence of Governor and Education Minister of the state, with distribution of certificates and cash prizes to felicitate the research projects. The honored researchers from various disciplines are:

1. **Mr. Kamal Solanki**, IIT Naya Raipur, Electrical, Electronics and Telecommunication Engineering.
2. **Mr. Shreyansh Dixit**, NIT Raipur, Mechanical, Mechatronics and Production Engineering.
3. **Ms. Srishti Varma**, Pt. Ravishankar Shukla University, Biology.
4. **Pratik Kumar Goyal**, CSVTU Bhilai, Civil and Architecture Engineering.
5. **Agniv Tapadar**, IIT Bhilai, Computer Sciences, Electronics, Information Technology, Instrumentation etc.
6. **Mayank Shrivastav**, NIT Raipur, Earth, and Atmospheric Sciences.
7. **Snehal Narkhede**, Amity University Raipur, Environmental Sciences, Engineering and Forestry.
8. **Ms. Priyanka Arya**, NIT Raipur, Mining, Metallurgy and Applied Geology.
9. **Ms. Shikha Pandey**, GGU Bilaspur, Medical and Pharmaceutical Sciences.
10. **Ms. Pinki Miri**, Govt. Nagarjun PG College of Science, Raipur, Biotechnology, Biochemistry, Bioinformatics and Biomedical Sciences.
11. **Ms. Jyoti Rani**, IIT Bhilai, Mathematical and Statistical Sciences, Vedic Mathematics.

12. **Mr. Mahendra Kumar**, Pt. Ravishankar Shukla University Raipur/ Amity University Raipur, Home Science and Behavioral Sciences (Psychology).

13. **Dr. Shalakra John**, IGKV Raipur, Agricultural Sciences.

14. **Mr. Harshaj Singh Tuteja**, IGKV Raipur, Agricultural Engineering Technology.

15. **Ms. Nikita Raghuvanshi**, Pt. Ravishankar Shukla University Raipur Chemical Sciences.

16. **Dr. Vandana Bhagat**, Kamdhenu University Durg, Veterinary Sciences and Dairy Technology.

17. **Mr. Tukendra Kumar**, NIT Raipur, Life Science.

18. **Mr. Sourabh Gaurah**, GGU Bilaspur, Physics.

In the valedictory ceremony, the Special Guest was **Dr. Rajeev Prakash**, Director, IIT Bhilai, **Dr. M.K. Verma**, Vice Chancellor, CSVTU was the Guest of Honor while **Dr. N.V. Ramana Rao** presided over the event. The ceremony started with the welcome of the guests. While giving his views in the program, **Dr. Rao** explained how the event was organized to promote young scientists so that innovation is encouraged in the country and innovation can establish new dimensions in Amritkaal. **Dr. Rajiv**, through his speech emphasized mutual cooperation and asked everyone to take inspiration from today's story of rabbit and turtle. Recalling the achievements of his life, **Dr. Verma** recalled his Young Scientist Congress days and said that your attitude, dedication, and behavior decide the direction of your success. **Agniv Tapdar**, Winner of the Theme of Computer Science, said that he has developed a technology in which adulteration of milk can be detected. **Snehal Narkhede**, Winner of Environmental Science, said that she has invented a technology by which agricultural waste can be used to clean polluted water. All the participants were awarded certificates and medals. The program ended with a vote of thanks by **Dr. Rakesh Tripathi**.

Sexual Harassment Prevention Week & Workshop on a Holistic Approach towards Women Empowerment



Internal Complaints Committee, NIT Raipur organized a program on **Sexual Harassment at Workplace Prevention Week** from 9th to 16th of Dec. 2023. The aim of this program was to generate awareness towards creating a safe and secure environment for woman at work places. To commemorate the

week an Essay and Slogan writing competition in Hindi and English and a Poster making competition was arranged.

Internal Complaint Committee, NIT Raipur organized a 5-day workshop on **A Wholistic Approach Towards Women Empowerment** from 8th to 12th Jan. 2024. The **Hon'ble Shri Justice Chandra Bhushan Bajpai**, *Former Judge, High Court of Chhattisgarh, Bilaspur* graced the occasion as the Chief Guest. The Chief Patron of the event was **Dr. Suresh Haware**, *Chairman BOG, NIT Raipur* and the Patron was **Dr. N. V. Ramana Rao**, *Director, NIT Raipur*. This event was organized under the guidance of **Dr. Sadhana Agrawal**, *Professor, DoP* and **Dr. Shubhrata Gupta**, *Professor, EE*. The event was coordinated by **Dr. Swasti Sthapak**, *Professor, DAP*, **Dr. Priyanka Tripathi**, *HoD, MCA*, and **Dr. Sagarika Bhattacharya**, *Assistant Professor, DoC*. The event was graced by the presence of **Mrs. Jyoti Rao**, *w/o Dr. N. V. Ramana Rao*, and **Mrs. Nalini Haware**, *w/o Dr. Suresh Haware*. The Chief guest of event was **Mrs. Milna Kurre**, *DIG/CID Police Headquarters, Naya Raipur, Chhattisgarh*. The event was attended by **Dr. Samir Bajpai**, *Head, CDC*, **Dr. P. Y. Dhekne**, *Registrar, Deans, faculty members, scholars, and students*. **Dr. Agrawal** talked about the importance of women empowerment and discussed the significance of the workshop. **Dr. Rao** shared his thoughts on the workshop and encouraged women to not compare themselves with other women but with themselves and keep on cultivating skills that help them reach greater heights in their lives. **Dr. Haware** quoted an incident from the life of Swami Vivekananda and expressed his opinion on women empowerment. **Mrs. Kurre** talked about fairness and representation in industries and the significance of entrepreneurship. She believes that every woman has untapped potential and education is pivotal in empowerment of women and shared her personal experiences and expressed how she tries to handle matters using soft skills. **Dr. Surbhi Dubey**, *Associate Professor, Department of Psychiatry, Dr. Jawaharlal Nehru Memorial Medical College* talked about how lack of socialization hinders mental health growth and management and emphasized upon the importance of happiness in one's life as only then can a person be completely effective. **Dr. Rajput Shraddha Bhausingh**, *Assistant Professor, HNLU Raipur* preached that women should be aware of their rights and laws and develop a strong decision-making ability. **Dr. Rajni Devangan**, *Gynecologist, Agrawal Hospital* suggested women understand their body and take care of mental as well as physical health and suggested regular workout. **Dr. Nivedita Chaubey**, *Pediatrician and Consultant, Government Ayurvedic College, Raipur* suggested taking healthy meals in your motherhood and talked actively about the kids' psychology. **Dr. Lokesh Singh** and **Ms. Neha Khare**, *Branch Manager*, shed light on crucial aspects of women's well-being and financial empowerment. **Dr. Lokesh Singh** addressed the audience with a comprehensive discussion on women's mental health and highlighted the prevalence of conditions such as depression, anxiety disorders, post-traumatic trauma, and eating disorders. **Dr. Singh** advised sharing small things to avoid depression and

underscored the importance of seeking help for suicide prevention. **Ms. Neha Khare** showcased the strength of women in multitasking and stressed the significance of financial self-dependence and urged women to be aware of their financial interests, indicating that financial empowerment begins with understanding every aspect of one's finances. She encouraged women to invest wisely, advocating for placing funds in external avenues rather than keeping them solely personal. **Mrs. Alpana Sharat Tiwari** delved into the impact of emotional quotient (EQ) in empowering women, stressing the need to cultivate self-motivation and enhance social and communication skills. She emphasized that the dynamic synergy between EQ and Information Technology (IT) serves as a powerful catalyst for women's empowerment. **Dr. Varsha Varvandar**, *Director, Myaglakadam* defined the concept of assertiveness with a resounding *No Means No*, she urged attendees to make their voices heard and emphasized the importance of protecting mental health. She advised against being a people pleaser, cautioned against manipulation, and encouraged rebuilding self-esteem and concluded with a motivational message, encouraging attendees not to fear life's uncertainties, as every experience, whether positive or otherwise, contributes to personal growth. **Mr. Bajpai's** discourse not only traversed the legal landscape but also served as a beacon of awareness for the audience. He elaborated on numerous sections of the **Indian Penal Code (IPC)**, unraveling the intricacies of legal provisions designed to safeguard the rights and dignity of women and explained the significance of legal frameworks in promoting women's empowerment and highlighted the role of these laws in addressing and preventing issues related to women's safety, emphasizing the need for a collective effort in creating a secure and supportive environment. In the valedictory session of the empowerment event, **Dr. Rao** expressed his satisfaction with the participation of speakers, acknowledging the empowerment achieved by all attendees. **Shri Bajpai** inspired the audience to not only strive for personal empowerment but also to contribute to building a better nation. The event transitioned to the prize distribution ceremony, recognizing excellence in various competitions. **Mansi Rai** secured the 1st position in **English Essay writing**, while **Isha Mehta** claimed the 2nd position. **Aditi Pariwal** clinched the 1st position in **Hindi Essay writing**. **Shreya Mehta** and **Abi Sarkar** secured the 1st and 2nd positions, respectively, in **English Slogan writing**. **Shristi Soni** and **Jyoti Rajput** claimed the 1st and 2nd positions in **Hindi Slogan writing**. Lastly, **Purva Yewle** received recognition for securing the 1st position in **Poster Making**. The valedictory session concluded with a vote of thanks delivered by **Dr. Swasti Sthapak**.

Annual Alumni day 2023



NIT Raipur organized the **Annual Alumni Day 2023** meeting session at the Institute's Golden Tower on 24th Dec. 2023. **Dr. N.V. Ramana Rao**, *Director, NIT Raipur*, graced the occasion as the Chief Guest. The Alumni meet session was organized under the guidance of the **Alumni Association, GEC, NIT Raipur**. The event commenced with the registration and fellowship ceremony. The Golden Tower witnessed the reunion of the batches of **1963 (Diamond Jubilee)**, **1973 (Golden Jubilee Reunion)**, **1988 (Coral Reunion)**, and **1998 (Silver Jubilee Reunion)**. **Mr. Mahesh Chandak**, *Alumnus (1998)*, delivered a welcome speech, shedding light on the Alumni Association's role and emphasizing the institution's development, particularly the Incubation Centre. **Mr. Anant Singh Parihar**, *Secretary, Alumni Association* highlighted the significant contributions, with nearly 1.21 Crores being utilized for such cases. The association's commitment towards skill development was emphasized by the dedication of **Mr. Atul Dwivedi**, **Mr. Sachin Saxena** and **Mr. Pradeep Modi**, *Alumni (1998) batch*. Additionally, all the delegates shared their overwhelming feelings of nostalgia and shared their greatest learnings on stage. The felicitation ceremony was followed by honoring the esteemed batches of 1963, 1973, 1988, and 1998. **Mr. Chandratan Mundra**, *Alumnus (1963)*, expressed his gratitude for the guidance of the Institute and recalled the exceptional engineers it has produced. **Mr. Pankaj Gautam**, *Alumnus (1973)*, congratulated the Golden Jubilee graduates, appreciating the equal treatment and focus on knowledge transfer by the faculty. **Mr. Anil Nehlani**, *Alumnus (1988)*, acknowledged their achievements and thanked the Alumni Association for organizing the memorable event. **Mr. Atul Dwivedi** extended gratitude to all present batches, emphasizing how the celebration united the entire alumni community. The event reached its zenith with an address by **Dr. N. V. Ramana Rao**, who congratulated the alumni for their continued success. He announced the introduction of four awards for outstanding alumni from the following year, recognizing their noteworthy contributions and attributed NIT Raipur's success to the enduring support and contributions of its alumni during their student years. The celebration concluded with a festive lunch and the alumni visiting their respective departments, reminiscing about their academic journey.

Archifest' 24



Department of Architecture and Planning (DAP), NIT Raipur organized Archifest '24 on 13th and 14th Feb. 2024 under the guidance of **Dr. Abir Bandopadhyay**, *HoD, DAP*. **Dr. Debashis Sanyal**, *Professor, DAP* inaugurated the fest and congratulated the students for the successful organization of the fest. Students were divided into four groups, namely,

Jitters, Gleam, Chroma, and Floret. Events such as **Quiz Competition, Model making Workshop, Stygian Postulate** were organized on day one. Day two consisted of competitions such as **D4- The major event of the Eve, Cultural competitions, Nature's Moodboard** etc. The fest came to an end with the thanking ceremony and the announcement of Mr. and Ms. Archifest' 2024 during the closing ceremony. **Team Jitters** emerged as overall winners, and prizes were distributed to the winners of the other competitions. The two-day event proved to be a great success with the overall conduction by **Team ASAR (Association of Students of Architecture, Raipur)** under the guidance of **Dr. Shruti Nagdeve**, *Assistant Professor*, **Ar. Devanshi Gaur**, *Assistant Professor*, **Ar. Kailashpati Maurya**, *Faculty, DAP* in enlivening the essence of spring and create enthusiasm and rejuvenation among the young architects and professors.

Inaugurated Office of Foundation for Innovation & Entrepreneurship

NIT Raipur's First ever Office of **Foundation for Innovation and Entrepreneurship** was inaugurated on 16th Jan. 2024 On the occasion of **National Start-up Day**. On this occasion, **Dr. N.V. Ramana Rao**, *Director, NIT Raipur*, Deans, **Dr. Samir Bajpai**, *Head, CDC*, **Dr. Chandrakant Thakur**, *Faculty In-Charge, E-Cell*, **Dr. Saurabh Gupta**, *Faculty In-Charge, I-Cell*, **Mr. Pawan Kataria**, *Assistant Registrar* along with the esteemed faculty members and students of the Institute marked their presence. **NIT Raipur Foundation for Innovation & Entrepreneurship (NITRRFIE)**, a non-profit Technology Incubator of the Institute established to support blooming startups under the **National Initiative for Developing and Harnessing Innovations (NIDHI) – Technology Business Incubator (TBI)** program of the **Department of Science and Technology (DST)**. **Dr. N. V. Ramana Rao** highlighted the crucial role of startups in fostering innovation and entrepreneurship, urging for a transformation of the educational environment into an incubator.

Webcast of Pariksha Pe Charcha



NIT Raipur on 29th Jan. 2024, hosted the webcast of the 7th edition of **Pariksha Pe Charcha**, the interactive program initiated by our **Hon'ble Prime Minister Narendra Modi** for students and teachers. The Institute organized a webcast in the presence of students and professors connecting directly with the Prime Minister's insightful discourse on exam preparation. During the program, he provided tips and suggestions to

inspire students to handle exam pressure more effectively and improve their future. The Institute extended gratitude to the Hon'ble Prime Minister for this enriching experience.

Cancer Awareness Initiative Seminar



NIT Raipur organized a **Cancer Awareness Initiative Seminar** on 5th Feb. 2024 by **Faculty and Student Welfare Health Services**, and the **Department of Information Technology** on the occasion of World Cancer Day under the **HeAL (Health Awareness Lesson) and Viksit Bharat@2047**. Event coordinators were **Dr. Soumya Agarwal**, *Medical Officer, NIT Raipur*, **Dr. Mridu Sahu**, *Assistant Professor, IT* and **Dr. Deepika Agrawal**, *Assistant Professor, IT, NIT Raipur*. **Dr. N. V. Ramana Rao**, *Director, NIT Raipur*, graced the event with his presence. **Mrs. Jyoti Rao**, w/o **Dr. N. V. Ramana Rao**, **Dr. (Mrs.) A. B. Soni**, *Professor, DCE*, and **Dr. Debashish Sanyal**, *Professor, DAP*, were also present. The Keynote Speaker of the event was **Dr. Bhawna Sirohi**, *Medical Director, Senior Oncologist, Balco Medical Centre*. The other expert speakers included **Dr. Diwakar Pandey**, *Senior Consultant, Surgical Oncologist, Sanjivani CBCC Cancer Hospital*, **Dr. Yashwant Kashyap**, *Consultant Oncologist NHMMI Hospital* and **Dr. Amit Agarwal**, *Consultant Oncologist, AIIMS Raipur*. The event started with a beautiful rendition of the National Song. Faculty members presented saplings to the eminent speakers and other distinguished guests. **Dr. Rao** talked about the importance of awareness in early detection and treatment of cancer. **Dr. Amit Agarwal** discussed cancer's ancient prevalence and emphasized timely detection's potential for survival and normalcy. **Dr. Diwakar Pandey** spoke about Tobacco and its role in Cancer. **Dr. Yashwant Kashyap** talked about risk factors causing cancer and spoke about cervical cancer vaccines in India. **Dr. Bhawna Sirohi** spoke on cancer awareness, stressing early detection, prevention, and differences between Western and Indian healthcare. Following a brief Q&A, speakers received certificates, and the event ended with a vote of thanks.

Praise Heaped by Parliamentary Committee



A Meeting between **Rajbhasha Samiti- The Official Language Committee of NIT Raipur** and **The Parliamentary Committee of Official Language** took place on 20th Feb. 2024. **Dr. N. V. Ramana Rao**, *Director, NIT Raipur*, delivered the welcome speech in Hindi. **The Hon'ble Ministers of Parliament** were impressed by the welcome address. The meeting concluded with the Ministers appreciating NIT Raipur's efforts in Hindi and encouraging us to continue making more efforts.

Lecture on Science and Spirituality



NIT Raipur organized a public lecture on the topic of **Science and Spirituality** in association with **Vivekananda Manav Prakash Sansthan, Raipur** on 14th Feb. 2023. The Chief Speaker of the session was **Swami Sarvottamananda**, *Monastic Faculty, CSE, and Vice-Chancellor, Ramakrishna Mission Vivekananda University, Belur*. **Dr. A. B. Soni**, *Director (I/C), NIT Raipur*, and **Dr. P. Y. Dhekne**, *Registrar*, **Dr. Shrish Verma**, *Dean (Academics)* and **Dr. Nitin Jain**, *Dean (SW)*, and the students, as well as the faculty members were part of this event. The session explored fundamental science questions - what, why, and how. **Swami Sarvottamananda** discussed Swami Vivekananda's teachings, advocating for self-belief over belief in gods. He emphasized Upanishadic concepts like Pratyaksha and Anumaan, promoting logical religious practices. In conclusion, he suggested integrating spirituality into science for a holistic understanding. Engaging with the audience, he addressed queries, fostering appreciation for both disciplines.

Celebration of Veer Baal Diwas



NIT Raipur resounded with the commemoration of **Veer Baal Diwas** on 26th Dec. 2023, echoing tales of bravery and

sacrifice. This significant celebration coincided with the **Prakash Purab**, marking the birth anniversary of **Sri Guru Gobind Singh Ji**, the 10th Guru of Sikhs and founder of the *Khalsa* community. The event unfolded as a multifaceted observance, vibrant cultural expression, and a unifying spirit of community.

Live Web Broadcast of the Prime Minister's Speech and Conducted a Seminar entered on Semiconductor Technology



NIT Raipur organized a seminar on **Semiconductor Technology** and hosted the **live webcast of the Address of PM to the youth on the Laying of the Foundation Stone of 3 Semiconductor Facilities under India's Techade: Chips for Viksit Bharat** on 13th Mar. 2024. The event was graced by the presence of **Dr. N. V. Ramana Rao**, *Director, NIT Raipur*. **Dr. Shrish Verma**, *Dean (Academics)* delivered an introductory lecture on Semiconductor and explained meaning of the word *Techade* which is a combination of technology and decade. India Semiconductor Mission has been setup by the Government of India to create an end-to-end semiconductor ecosystem to enable the nation to become a significant player in the global semiconductor industry. **Hon'ble Prime Minister Shri Narendra Modi** laid down the foundation stone of the three Semiconductor facilities in Dholera, Gujarat, Sanand and in Morigaon, Assam. This day marked the beginning of making India a global hub for semiconductor chip production. **Mr. Modi** highlighted India's shift towards designing chips for specific applications, foreseeing leadership in semiconductor manufacturing. These chips, crucial for various sectors like Smart Cities, Railways, Aviation, Space, Defense, and disaster management, signify a future of machine-to-machine data transactions. He emphasized the vital role of semiconductor chips in today's technology, stressing India's ambition to design and produce them domestically and highlighted lessons from the pandemic on the importance of a reliable semiconductor supply chain and the strategic advantages of such initiatives. Mentioning India's position as the second-largest mobile manufacturer, he cited ongoing national missions like the **National Quantum Mission, National Research Foundation, and AI mission**. **Dr. B. K. Sahoo**, *HoD, DoP*, talked about the electrical scenario of semiconductors and explained band gap, band theory and semiconductor engineering. He highlighted advantages of manmade semiconductors over pure

semiconductors and talked about various generations of semiconductors, their properties and importance in all spheres of technology. **Dr. Chitrakant Sahu**, *Associate Professor, ECE* called semiconductors the *Backbone of Smart Devices* and discussed technology scaling trends with respect to the size of semiconductor chips. **Dr. Namrata Gupta**, *Senior R&D Engineer, Synopsys INC*, delivered a lecture on **The Semiconductor Edge: Past, Present and Future** where she talked about the increase in demand of semiconductor chips and how domestic production becomes pivotal subsequently. She discussed cost effective and robust solutions of the issues faced in Semiconductor ecosystem design and manufacturing. Her presentation included names of designing and manufacturing companies of Semiconductors like Intel, Samsung Google, Synopsys, etc.

Eye Care Camp



NIT Raipur's **Dispensary and Department of Master of Computer Application (MCA)** organized the **Eye Care Camp** on 20th Feb. 2023 in collaboration with **ASG EYE Hospital Pvt. Ltd. Raipur**. The Eye Care Camp was inaugurated in presence of **Dr. N. V. Ramana Rao**, *Director, NIT Raipur*, **Dr. R. K. Tripathi**, *Dean (P&D)*, **Dr. Debashish Sanyal**, *Dean (Faculty Welfare)*, **Dr. Nitin Jain**, *Dean (SW)*, **Dr. Praphull Dewangan**, *Head, ASG Eye Hospital*, along with **Dr. Harendra Bikrol**, **Dr. Shubha B. Kosley**, **Dr. Sameer Sonkar**, **Dr. Saumya Agrawal**, *Medical Professionals, Heath Centre, NIT Raipur*, faculty members, and students. **Dr. Shubha B. Kosley** gave a briefing before the event started, explaining the significance of the day and introducing the guests. **Dr. N. V. Ramana Rao** praised the organizers, stressing the need to preserve eyesight. The importance of maintaining ocular hygiene, regular eye examinations, and raising awareness about ocular health and overall well-being was underscored. **Dr. Dewangan** highlighted the prevalence of computer vision syndrome among students in contemporary times, advocating for the adoption of preventive measures such as the 20-20-20 rule. **Dr. Priyanka Tripathi**, *HoD, MCA*, expressed gratitude to all dignitaries, participants, and organizers. The Eye Care Camp aimed to promote health awareness and foster a healthier community, addressing the significance of eye health.

MoU

NIT Raipur and CIPET Chennai

NIT Raipur and C.I.P.E.T(Central Institute of Petrochemicals Engineering & Technology), Chennai (Head Office) have signed a Memorandum of Understanding (MoU) on 29th Dec. 2023 by **Prof. N. V. Ramana Rao**, Director, NIT Raipur and **Prof. Shishir Sinha**, Director General, CIPET, Chennai in the presence of **Prof. Kamal Kishore Pant**, Director, IIT Roorkee, **Dr. Alok Sahu**, Director & Head of CIPET, Raipur, with MoU coordinators and faculty members. The primary objective of this MoU is to establish cooperation and collaboration between the N.I.T., Raipur and C.I.P.E.T., Chennai with the aim of optimizing their resources and enhanced opportunities for stakeholders of both institutions.

NIT Raipur and Bureau of Indian Standards (BIS)

NIT Raipur and Bureau of Indian Standards (BIS) have signed a Memorandum of Understanding (MoU) on 24th Jan. 2024. **Dr. N.V. Ramana Rao**, Director, NIT Raipur, **Mr. Dibyendu Chakrabarti**, Scientist-G & Deputy Director General (Eastern region) BIS Kolkata and **Dr. P. Diwan**, Dean (R&C), NIT Raipur, **Mr. Sumit Kumar**, Scientist-D and Joint Director, BIS Raipur Branch Office, **Dr. J. Anandkumar**, Associate Dean (R&C), NIT Raipur, **Dr. Raj Kumar Sahu**, Assistant Professor, DME & Coordinator, NIT Raipur and **Mr. Prabhu Nath Yadav**, Scientist-D & Joint Director of BIS Raipur and the Nodal officers and faculty members from both the institutions were present at the signing of the MoU. This cooperation and collaboration between NIT Raipur and BIS Kolkata will not only prove beneficial for the students by providing them with enhanced opportunities, but also for the stakeholders of both the organizations.

NIT Raipur and CSIR-CRRI Delhi

Academic Activities

STTP/Conference/Workshop Conducted

2nd National Conference on Contemporary Issues and Trends in Literature, Society and Politics



NIT Raipur and CSIR-CRRI, New Delhi signed a Memorandum of Understanding (MoU) on 27th Feb. 2024 to establish cooperation and advanced collaboration between both Institutes for advanced collaborative research in Transportation Infrastructure, Architecture, and Urban Planning. **Dr. N. V. Ramana Rao**, Director, NIT Raipur, and **Dr. Manoranjan Parida**, Director, CSIR-CRRI, New Delhi, signed the MoU in the presence of **Dr. S. Velmurugan**, Chief Scientist, CSIR-CRRI New Delhi, **Dr. Rajesh. K. Tripathi**, Dean (P&D), **Dr. P. Diwan**, Dean, (R&C) and **Dr. D. Sanyal**, Dean, (Faculty Welfare) of NIT Raipur along with Nodal officers, Faculty members, and Scientists from the institutions.

MoA

Establishment of Center for Mahanadi River Basin Management Studies

NIT Raipur signed a Memorandum of Agreement with the Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti, Ministry of Education, Government of India (GoI), Centre for Ganga (cGanga), IIT Kanpur, and NIT Rourkela on 28th Feb. 2024, to establish Centers for Mahanadi River Basin Management Studies. NIT Raipur is the Lead Consortium Institute with NIT Rourkela as its Fellow Consortium Institute for the Mahanadi River Basin. **Dr. N. V. Ramana Rao**, Director, NIT Raipur, signed the MoA in the presence of **Hon'ble Shri Gajendra Singh Shekhawat**, Union Cabinet Minister, Ministry of Jal Shakti, GoI, and **Prof. Umamaheshwar Rao Karanam**, Director, NIT Rourkela, at New Delhi. **Dr. Samir Bajpai**, Head, CDC, along with **Dr. Ishtiyahq Ahmad**, Project Investigator and **Dr. Mani Kant Verma**, Project Investigator were present during the MoA signing ceremony.

Department of Humanities & Social Sciences (DHSS), NIT Raipur organized the National Conference on Contemporary Issues and Trends in Literature, Society and Politics on 16th Dec. 2023. The day-long conference featured research papers and speaker sessions on the role that language, literature and related domains play in the interactions and development of society.

19th International Conference on Information Systems Security ICISS-2023

Department of Information Technology (IT), NIT Raipur organized a four-day International conference on Information Systems and Security (ICISS 2023) from 16th Dec. to 19th

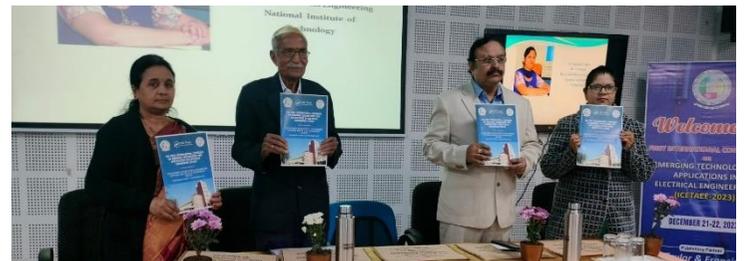
Dec. 2023. Leading experts discussed information and systems security, emphasizing the need for continuous technical advancements for a secure digital future. The conference concluded on 19th Dec. 2023.



Dr. N. V. Ramana Rao, Director, NIT Raipur was the Chief Patron of the conference. **Professor R.K. Shyamasundar**, JC Bose National Fellow & Distinguished V. Professor at IIT Bombay, assumed the role of the General Chair for ICISS 2023. The conference's chairman was **Dr. Rakesh Tripathi**, Associate Professor, IT. The organising secretaries were **Dr. Chandrashekar Jatoth**, **Dr. Rajesh Doriya**, and **Dr. Tirath Prasad Sahu**, Assistant Professors, IT. The valedictory ceremony witnessed the esteemed presence of **Shri C. Sivakumar**, Regional Executive Director, NTPC, Naya Raipur as the Chief Guest of the ceremony. **Dr. Debashis Sanyal**, Dean (Faculty Welfare) and **Mr. R. Sarangapani**, General Manager & HOD (Station Engg. And R&M), NTPC, Naya Raipur served as the Guest of Honour with **Dr. Sanjay Kumar**, HoD, IT, graced the occasion with their presence. **Shri C. Sivakumar** illuminated the critical importance of cybersecurity, highlighting the vast potential of the Industrial Internet of Things (IoT) and the imperative need for its security. Mr. Sivakumar also underscored the significance of collaboration between academia and industry as a crucial factor in addressing complex challenges in these domains. **Mr. R. Sarangapani** emphasised the importance of security across various domains. **Dr. Debashis Sanyal** further delved into the discourse by emphasising the importance of security within the realm of Smart IoT architecture. **Dr. Sanjay Kumar** conveyed his gratitude to the organising committee participants for their pivotal roles in ensuring the conference's success. He expressed heartfelt thanks for the collaborative efforts that contributed to the event's accomplishments. The conference gathered leading experts, researchers, and professionals to delve into the critical aspects of information and systems security. The invited talk delivered by **Thomas Silkjaer**, XRP Ledger Foundation, Denmark focused on **Follow the Money** and **Mauro Conti**, Full Professor, University of Padua, Italy, and TU Delft, Netherlands on **& covert Stories: Threats Evolution in Traditional and Modern Technologies**. A keynote session by **Nishanth Chandran**, Principal Researcher, Microsoft Research, India focused on **How to Train and Use AI Models on Sensitive Data without Compromising Privacy?** and **Sanjam Garg**, Associate Professor, University of California, Berkeley on **hinTS: Threshold Signatures with Silent Setup**, along with

the PhD forum lightning talks, Tutorials, Demonstrations and Poster Presentations were the highlight of the conference. There were approximately 100 paper presentations in different sessions on **System Security**, **Network Security**, **Blockchain**, **Crypto**, **Privacy and Security using AI/ML** under session chairs **Vishwas Patil**, **Radhika B. S.**, **Ram Krishnan**, **Nishanth Chandran**, **R. K. Shyamasundar**, **Satya Prakash Sahu**, the experts in the respective fields. **Dr. Chandrashekar Jatoth** extended a formal vote of thanks to everyone involved in making the conference a triumph. The conference provided an opportunity for in-depth talks, knowledge sharing, and collaborative efforts to address increasing information and system security concerns.

International Conference on Emerging Technologies & Applications in Electrical Engineering (ETAAEE) 2023



Department of Electrical Engineering (EE), NIT Raipur organized a two-day **International Conference on Emerging Technologies & Applications in Electrical Engineering (ETAAEE)** on 21st and 22nd Dec. 2023. The event was graced by the presence of **Mr. Kailash Dhar Diwan**, President, GEC-NIT Raipur Alumni Association, Retired Chairman & Managing Director, Hindustan Copper Limited, who served as the Chief Guest and **Dr. A.S. Thoke**, Retired Professor, EE, NIT Raipur, was the esteemed Guest of Honor. **Prof. N.V. Ramana Rao**, Director, NIT Raipur assumed the role of the Chief patron for the conference. The conference Chairperson **Dr. Anamika Yadav**, HoD, EE illuminated the department and college's historical tapestry, underscoring pivotal milestones and provided insights into the two keynote sessions scheduled, featuring **Dr. Sanjeevikumar Padmanaban**, Professor, Electrical Power Engineering, University of South-Eastern Norway discourse on **Power Electronics Technology in Microgrid and Electric vehicles**, as well as **Dr. Ramani Kannan's**, EE, Universiti Teknologi PETRONAS Malaysia Chapter insights into the **Future of Power Electronics in shaping the Renewable Energy Landscape**. **Dr. Rao** accentuated the revolutionary potential of smart grids in optimizing energy usage, explored the pivotal integration of IoT for heightened connectivity, and shed light on advancements in renewable energy technology for sustainable development. The narrative further unfolded to encompass the transformative realms of **Nanotechnology**, **Artificial Intelligence (AI)**, **Machine Learning (ML)**, **Augmented Reality (AR)**, and **Virtual Reality (VR)**, offering profound

insights into the dynamic landscape of electrical engineering. **Mr. Diwan** delved into the global landscape of innovation and emerging technologies and expounded on the transformative potential of electric vehicles, highlighting the imperative of reducing carbon footprints and explored the intricate realm of the IoT and underscored the significance of enhancing the efficiency of electric grids. **Dr. A.S. Thoke** delved into the intricacies of **C² - Melding the worlds of Computer and Communication technologies**. He explained the transformative concept of smart grids, delving into their potential to reshape energy paradigms and went further to illuminate the critical significance and potential risks of cybersecurity within the realm of smart grids, providing a nuanced perspective on the evolving technological landscape.

The *Organizing Secretaries*, **Dr. K. Chandrasekaran**, **Dr. D. Suresh**, **Dr. V. Hari Priya**, *Assistant Professors, EE* played a pivotal role in coordinating the conference. The patrons for the conference were **Dr. Prabhat Diwan**, *Dean(R&C)*, and **Dr. Shrish Verma**, *Dean (Academics)*. **Dr. Kannan** delivered a presentation centered on **The Future of Power Electronics in Shaping the Renewable Energy Landscape**. The session captivated the audience with insights into **Dynamic PV Response, Dynamic Convergence Response, PV Tracking under partial shading conditions**, and an **Innovative PV-fuel cell single-stage microgrid** featuring a Lyapunov control scheme. **Dr. Chandran** delved into crucial topics such as Sustainable Development Goals (SDG) and the status of renewable energy in India. After the keynote session, participants seized the opportunity to showcase their research through paper presentations, with a total of 6 sessions which included 3 offline and 3 online sessions and comprising of 40 technical papers each. Certificates were awarded to the best papers, acknowledging the diverse perspectives and discoveries in Electrical Engineering. **Dr. K. Chandrashekar** provided a comprehensive summary of this two-day event, encapsulating all facets of the conference. Expressing gratitude, **Dr. Prabhat Diwan** emphasized the importance of not only publishing research articles but also advancing the research by presenting it on various platforms and collaborating with those who cite the work. The conference proved to be a platform for intellectual exchange, fostering collaboration, and advancing collective knowledge in the dynamic field of Electrical Engineering.

NIT Raipur's Expert Talk on Artificial Intelligence and Interaction Design



Department of Information Technology (IT), NIT Raipur organized an expert talk on **Artificial Intelligence and Interaction Design** on 12th Jan. 2024 under **Viksit Bharat@2047** mission, a Govt. of India initiative. The session

was graced by **Dr. Chandan Kumar**, *Head of Interaction Design and Technologies Research Group, Fraunhofer Institute for Industrial Engineering IAO, Stuttgart, Germany*. The event was convened under the guidance of **Dr. Sanjay Kumar**, *Convener* and **Dr. Rakesh Tripathi**, **Dr. Mridu Sahu** and **Dr. Tirath Prasad Sahu**, *Coordinators*. **Dr. Chandan Kumar** and his team explored the synergy of Human-Computer Interaction and Artificial Intelligence, aiming to empower individuals through intuitive and inspiring user interfaces. His research work focuses on various facets of interaction design, including multimodal interaction, eye tracking, intelligent interfaces, visualization, and information extraction. He elucidated the dynamic landscape where AI and Data Science converge, presenting a compelling arena for innovation across diverse sectors such as healthcare, education, commerce, and social media, each brimming with substantial potential and underscored the paramount significance of the user perspective in shaping research design and illuminated the path towards process and decision optimization using data analytics and forecasting. Emphasizing the pivotal role of interaction design he envisioned an enhanced AI landscape achieved through the seamless fusion of data and design elements and elaborated on future scenarios in **Automotive Technology, Adept Error Handling with Active Worker Assist, Transformative potential of Generative AI**, and the **Streamlined automation of tender requests**, specifically in customer requirement handling. **Dr. Kumar** astutely attributed the rapid ascent of ChatGPT, amassing a remarkable one million users in a mere five days, to the synergy of AI and its inherently user-friendly system. **Dr. Chandan's** message throughout the talk was that the convergence of tools and expertise in data analytics and user experience design can empower enterprises to make informed, effective, and ethically sound decisions, highlighting the pivotal role of the symbiotic interaction between technology and human-centric design principles. The talk was followed by a Q&A session with participation from the attendees. The informative session came to an end with a vote of thanks followed by a memento presentation ceremony.

Third International Conference of Power Control and Computing Technologies



NIT Raipur inaugurated the 3rd **International Conference on Power Control and Computing Technologies** on 18th Jan. 2023, under the guidance of the **Department of Electrical Engineering (EE)** and co-sponsored by various verticals of **IEEE: Industry Applications Society, Student Branch NIT Raipur, and IEEE Madhya Pradesh Section**. The three-day conclave provided a forum for discussion and debate on various technological advancements in the field of engineering to research scholars and students across the globe and provides a platform for interdisciplinary research to solve relevant real-world problems. The Guest of Honour of the event was **Dr. N.V. Ramana Rao**, *Director, NIT Raipur*. **Mr. M.K. Badapanda**, *Scientific Officer and Head, RF Power supply section of RRCAT Indore*, and key figures such as **Mr. P.K. Gupta**, *Member in Chhattisgarh State Electricity Regulatory Commission*, **Dr. Prabhat Diwan**, *Dean (R&C)*, **Dr. Shrish Verma**, *Dean (Academics)*, **Dr. Shubhrata Gupta**, *Professor, EE*, and **Dr. Anamika Yadav**, *HoD, EE and Chairperson of the conference* along with other faculty members and students were present. **Dr. Yadav** illuminated the journey of the Institute's Electrical Engineering Department while revealing a global scholarly engagement, she shared the triumph of curating 166 exceptional papers from a pool of 351 submissions, symbolizing the convergence of intellect from across the globe in this year's conclave. **Mr. Gupta** delved into the theme of power control and computation, underscoring its significance. He passionately rallied students to engage actively in the discourse, fostering an environment where fearless dissent challenges conventional norms, paving the way for groundbreaking discoveries. **Mr. Badapanda** implored students to harness the full potential of the conclave, emphasizing the significance of forging connections with esteemed individuals and urged them to embrace this opportunity as a catalyst for expanding their perspectives through profound and insightful discussions. **Dr. Shrish Verma** celebrated the Institute's surpassing 1000 research paper publications in the prestigious **Scopus Indexed Journals**. **Dr. Diwan** echoed this triumph, declaring the successful organization of nine international conferences within the academic year, showcasing the Institute's commitment to scholarly excellence. The first technical session featured keynote speaker **Dr. Bhim Singh**, *Professor, EE, IIT Delhi*, who delved into the intricacies of the energy industry ecosystem. He expounded on the utilization of diverse non-renewable resources, drawing insightful comparisons with conventional counterparts and dissected the tariffs associated with solar and wind power, supplementing his theoretical seminar with compelling scientific data, vivid graphs, and charts. The conference provided a platform for insightful discussions, featuring 349 papers, with 149 presented and discussed from various foreign countries and prestigious institutions like IITs and NITs. Day 3 of the conference, initiated in 2020, boasted 15 technical sessions, showcasing the presentation of 149 papers out of the total 349.

Dr. M.K. Badapanda extended appreciation, with certificates for the best paper awards presented to the participants.

The three-day conference concluded with a vote of thanks by **Dr. Sachin Jain**, *Professor, EE*. The conference served as a forum for interdisciplinary research, intellectual exchange, and collaboration, propelling collective knowledge in the field of Electrical Engineering. The successful conduct of the conference underscored its significance in fostering advancements and solutions to real-world problems in the realm of engineering.

International Conference on Separation & Purification Techniques : Environmental Applications (ICSPT)



Department of Chemical Engineering (DCE), NIT Raipur organised the **International Conference on Separation & Purification Techniques: Environmental Applications (ICSPT)** on 19th Jan. 2024. The event was graced by the presence of **Dr. (Mrs.) S.K. Pandey**, *Former Director NIT Raipur* who served as the Chief Guest. **Dr. Anurag Garg**, *Professor, IIT Bombay*, was the Guest of Honour. **Dr. N.V. Ramana Rao**, *Director, NIT Raipur* was the Chief patron for the conference while **Dr. Prabhat Diwan**, *Dean (R&C)* was Patron of the event, **Dr. A. B. Soni**, *Director(I/C), NIT Raipur* was the Co-patron and **Dr. Amit Keshav**, *HoD, DCE* was the chairman of the conference. **Dr. J. Anandkumar**, *Associate Professor*, **Dr. Chandrakant Thakur**, *Assistant Professor*, and **Dr. M.S. Gaikwad**, *Assistant Professor, from the DCE* were the organizing secretaries for this conference.

Dr. Keshav guided the audience through the annals of the department's history, showcasing its evolution into a powerhouse of academic excellence. **Dr. Diwan** underscored the importance of the conference theme in contemporary research landscapes and explored the intricacies of separation and purification techniques, emphasizing their role in advancing scientific understanding. **Dr. Garg**, focusing on solutions pertaining to separations and purifications, shared valuable insights derived from his extensive expertise. His discourse not only contributed to the academic discourse of the event but also provided practical perspectives on addressing challenges in the field. **Dr. Pandey** provided an overview of various unit operations integral to separations and purifications, while navigating through the complex terrain of air and water pollution, emphasizing the critical need for

effective disposal of toxic and non-toxic waste. She expounded on the myriad health issues arising from pollution, seamlessly transitioning to the role of membrane technology in addressing these challenges. **Dr. Soni** emphasized the Institution's commitment to environmental sustainability, underscoring ongoing initiatives to reduce pollutants and foster a greener campus. **Dr. Pandey** navigated through the complex terrain of air and water pollution, emphasizing the critical need for effective disposal of toxic and non-toxic waste while expounding on the myriad health issues arising from pollution, seamlessly transitioning to the role of membrane technology in addressing these challenges. **Dr. Thakur** delivered the vote of thanks, expressing gratitude to all the distinguished guests, esteemed speakers, and participants for contributing to the success of the conference. The valedictory session of the conference on 20th Jan. 2024, featured presentations of 93 research papers from various institutions, with 82 selected for the conference while 6 technical sessions were organized during the seminar. The Best Research Paper award was given to **Prakhar Jain, Aditya Narayan Tiwari, Dr. Aparna, Dhruv Mukhopadhyay, Deepanjan Roy, Usha Lakra, and Saranga Baishya**. During the closing ceremony, **Dr. A.K. Poonia, Associate Professor, DCE**, highlighted the exchange of ideas in this conference. The conference concluded with certificates awarded to all participants.

National Conference on Disaster Mitigation & Management NCDMM-2024



Department of Civil Engineering (CE), NIT Raipur organized a two-day National Conference on Disaster Mitigation and Management (NCDMM 2024) on 23rd and 24th Jan. 2024. The Conference was inaugurated with the gracious presence of **Shri. D. N. Gidronia, Officer, Special Duty (OSD), Water Resources Department, Government of Chhattisgarh** as Chief Guest and **Dr. M. K. Verma, Professor, CE** on deputation as *Vice Chancellor, CSVTU Bhilai* as Guest of Honour. The Chief Patron was **Dr. N. V. Ramana Rao, Director, NIT Raipur** with Patron as **Dr. P. Diwan, Dean (R&C)**. **Dr. Shirish V. Deo, HoD, CE** was the Chairman. **Dr. Ishtiyah Ahmad** and **Dr. Govardhan Bhatt, Assistant Professors, CE** were the organizing secretaries. **Dr. D. Sanyal, Dean, Faculty Welfare, Dr. R. K. Tripathi, Dean (P&D), Dr. Samir Bajpai, Head, CDC, Dr. G. D.**

Ramtekkar, Dr. U. K. Dewangan, Dr. L. K. Yadu Professors, CE and other respected faculty members of CE and other departments were also present. Inaugural session began with the introduction about the Conference and its significance by **Dr. Ishtiyah Ahmad**. Later on, **Dr. S. V. Deo** addressed the gathering and talked about the necessity of the disaster mitigation and its significance in everyday life. **Dr. M. K. Verma** discussed the advance tools and techniques like Artificial Intelligence and its utility in the current scenario and its influence in our life. Also, he talked about the natural disaster related to Water Resources and how we can cope up with it using advance technologies. **Dr. N. V. Ramana Rao** discoursed the natural calamities that have come into existence near our surroundings and how one as a Civil Engineer can come up with a solution. Later, **Shri D. N. Gidronia**, the Distinguished Chief Guest was introduced. While addressing the audience he was quite emotional sharing his alma mater from NIT Raipur. He elaborated about his expertise in the field and the solutions provided in the field for the mitigation of natural disaster related to water resources. The inaugural session concluded with a vote of thanks delivered by **Dr. Govardhan Bhatt**. After the inauguration, Key Note address was delivered by **Dr. Ratnesh Kumar, VNIT Nagpur** on **Disaster mitigation and management in the field of Structural**. Scholars and Professors coming from different places presented their Research Papers during **Technical Session-1** Chaired by **Dr. Rajesh Thakre, Thakre Consultants, Raipur** with a session moderator **Dr. Meena Murmu, Assistant Professor, CE**. **Technical Session-2** was conducted with Session Chaired by **Dr. Manish Saklecha, Principal, RIT Raipur & Er. Kapil Chandoik, Vice President, Civil Engg. Division, HIRA Group, Raipur** and Session Moderator as **Dr. Alfia Bano Assistant Professor, CE**. There were three more Technical Session on Day-2 of the conference. Valedictory session was organized and the Best Paper for each session was awarded with the distribution of certificates to all the participants and organizers.

Career Guidance session by METSO



METSO – The Metallurgical Society of NIT Raipur organized a Career guidance session in the Core sector on 24th Jan.2024. **Mr. Vikash Nashine, General Manager (O) at DSO, Blast Furnaces, Bhilai Steel Plant, SAIL** was the Guest Speaker. The session was supervised by **Dr. Manoj Kumar Chopkar, HoD, MME** and conducted by the team headed by **Dr. Sudip Kumar Sinha, Assistant Professor, Department of Metallurgical Engineering (MME)**. It aimed to raise

awareness about careers in the core sector among students. **Mr. Vikash Nashine**, *Diploma in Metallurgy, AMIIM, M.Tech in Steel Technology, and an MBA in HR & Marketing*, delved into his extensive experience, including roles in Sinter Making at BSP & DSP, Iron Making across renowned units like SAIL, TATA, JSW and JSPL. He covered vital aspects such as first aid training, PME, human factors, standards, mock drills, fire safety, fostering a safety culture. He illuminated various career paths in metallurgy. He elucidated the intricacies of Bhilai Steel Plant, SAIL and highlighted the skills requisite for success in the steel industry. The event's agenda, themed **Unlocking the World of Metallurgy Engineering, Discovering the Alchemy of Material Science, and Essential Role in Shaping Industries**, provided attendees with a panoramic view of the diverse facets of metallurgical engineering, sparking enthusiasm among aspiring metallurgical engineers and setting a precedent for future industry events by **METSO**.

Launching of M.Tech Program in Urban Planning

Department of Architecture and Planning (DAP), NIT Raipur formerly known as **Department of Architecture (DoA)**, announced the launch of a **M.Tech. Program in Urban Planning** on 1st Mar. 2024. It is a two-year, full-time postgraduate course for students in architecture, civil engineering, geography, and related fields. It covers urban design, transportation, environment, housing, and infrastructure. Participants engage in hands-on learning, including field visits, case studies, and internships. **Dr. Abir Bandyopadhyay**, *HoD, DAP*, emphasizes its importance amid urban challenges like rapid growth and climate change. The program readies students for sustainable urban development, especially in Chhattisgarh, as the first central government institution offering it in the state. Program will start with 20 seats next year, admissions will be in three categories: GATE, industry-sponsorship, and self-sponsored.

STTP on Enhancing Communicative Skills, Emotional Competence and Employability amongst youth



Department of Humanities and Social Sciences (DHSS), NIT Raipur organized a **Short-Term Training Program**

(STTP) on Enhancing Communicative Skills, Emotional Competence and Employability amongst Youth from 24th to 28th Feb. 2024. The workshop aimed to modernize participants' personality and employability for the 21st century, refining communication, academic language, and research skills, while fostering effective planning and self-evaluation for personal and professional growth. The session was orchestrated under the supervision of **Dr. Anoop Kumar Tiwari**, *HoD, DHSS*, **Dr. Sandip Sarkar**, and **Dr. Shashi Kanta Tarai**, *Assistant Professor, DHSS* serving as Program Coordinators. The inaugural session of the STTP was attended by **Dr. Anoop K. Tiwari**, **Dr. Sandip Sarkar**, **Dr. Shashi Kanta Tarai**, various faculty members, participants, and students. The Chief guest, **Dr. Samir Bajpai**, *Head, CDC*, elaborated the significance of the subject in today's rapidly evolving scenario. Drawing upon his experience in placements, he highlighted the prevalent use of coding software by companies due to the widespread adoption of AI and machine learning. **Dr. Bajpai** accentuated the advancements in sensor technology, which provide accurate data, and stressed the importance of continuous learning to adapt to changing circumstances and underscored the necessity of humanities skills in the current scenario and described the increasing demand for emotional intelligence in future workplaces. **Dr. Vasanthi Rajendran**, *Professor, RGNIYD*, connecting virtually, mentioned that the NEP 2020 primarily focuses on enhancing employability skills, acknowledging the importance of both technical and human skills and encouraged all participants to derive meaningful learnings from the STTP. Subsequently, students shared their feedback on the STTP, and certificates were handed out to acknowledge participation. The STTP hosted 90 participants, engaging in a series of 23 sessions held over the course of 5 days. The Valedictory ceremony for the STTP was organized on 28th Feb. 2024 in which **Dr. D. Sanyal**, *Dean (Faculty Welfare)* served as the Chief Guest alongside **Dr. Tiwari** and other faculty members and students. **Dr. Tiwari** reflected on the impact of attending workshops and seminars, highlighting how a single statement can alter one's perspective significantly. **Dr. Vasanthi**, joining remotely emphasized the importance of participants gaining employability skills and encouraged them to share their experiences from the STTP. **Dr. Sanyal** offered tips on interview participation, stressing the significance of communication skills, confidence, and making a positive first impression and advised against mixing personal and professional matters during interviews and addressed participants' queries effectively.

Lecture on Climate Change



Department of Architecture and Planning (DAP), NIT Raipur organized a special lecture on **Climate Change: Interdisciplinary Research Area in Architecture and Planning** by **Mr. Shailendra K. Mandal**, *Associate Professor, DAP, NIT Patna* on 27th Feb. 2024. The lecture underscored the critical role of interdisciplinary research in addressing complex challenges such as climate change, particularly within the realm of architecture and planning. **Mr. Mandal** emphasized the importance of interdisciplinary research in addressing complex issues like climate change and highlighted the need for architects and planners to integrate considerations of climate change into their design methodologies and project implementations. Given the profound impact of climate change on the built environment, architects and planners hold a pivotal responsibility in developing strategies to mitigate its adverse effects. He stressed the necessity of adopting innovative and sustainable approaches in architectural and planning practices. Furthermore, the lecture featured notable examples of interdisciplinary research initiatives aimed at tackling climate change, including the City Resilience Strategy for Patna City. These initiatives served as examples of how collaborative efforts across diverse disciplines can yield tangible solutions to address the challenges posed by climate change. The lecture sparked insightful discussions among participants, highlighting the enthusiasm and interest in the topic. Attendees participated in the Q&A session.

Workshop on ICT Enabled Employability Skills

Department of Humanities and Social Sciences (DHSS), NIT Raipur hosted a One-Day National workshop on **ICT Enabled Employability Skills** for Technical Students in Rural Areas in Chhattisgarh on 1st Mar. 2024. The program was sponsored by the **ICSSR (Indian Council of Social Sciences Research)**, New Delhi.

Expert Lectures Delivered by Faculty/Staff

- **Dr. Anuj K. Shukla**, *Assistant Professor, ME & Interim CEO, NITRRFIE* and **Mr. Pawan Kataria**, *Assistant Registrar, NIT Raipur & Interim Manager, NITRRFIE* served as Guest Speakers at an expert lecture on **National Startup Day** held on 16th Jan. 2024, at the **Institution Innovation Council, Pt. Ravishankar Shukla University, Raipur**.



The workshop emphasized the necessity of ICT enabled skills and facilitated discussions among scholars, researchers, and practitioners on elements, practices, and recent developments in ICT education, teaching, communication, and employability skills.

Lecture on Jayanta Mahapatra

Department of Humanities and Social Sciences (DHSS), NIT Raipur organized a Lecture session on the topic **Jayanta Mahapatra: Poetic Voices of an Experimentalist** which was delivered by **Dr. Binod Mishra**, *Professor, DHSS, IIT Roorkee* on 1st Mar. 2024. **Dr. Anoop Kumar Tiwari**, *HoD, DHSS*, **Dr. Shashi Kanta Tarai**, *Assistant Professor, DHSS*, **Dr. Sandip Sarkar**, *Assistant Professor, DHSS*, **Dr. Anil Manjhi**, *Assistant Professor, DHSS*, **Dr. Aswathi V. Anand**, *Assistant Professor, DHSS*, other faculty members, and PhD scholars were present in the program. The program was coordinated by **Dr. Tarai**. In this program, the Keynote Speaker, **Dr. Binod Mishra** emphasized on the dire necessity of understanding Indian poetry to have a transparent overview of the Indian Knowledge system and added that Poetry encapsulates the cultural ethos embedded in the human geography of any community; thereby poetry obtains a universal acclamation. He cited lines from various poems of Jayant Mahapatra and explained the intricacies and deep meaning they carried while highlighting how the concepts of **Silence, Loneliness** and **Emptiness** find an important place in Mahapatra's poetry and how reflections of the landscape of Odisha are interwoven in the lines of most of his poetry and described that introspective preoccupation, emphasis on subjective memory and close association with the modernist movement are the characteristics of Mahapatra's poem and as he played with the word in his poem, he is remarked as an experimentalist in this context. **Prof. Mishra** ended his lecture with lines *to me Poetry is dancing and Prose walking*.

- **Dr. Monalisa Biswal**, Assistant Professor, EE delivered an invited lecture on **Protection and Control techniques Applied to Microgrid** at **3rd International Symposium on Sustainable Energy and Technological Advancements (ISSETA 2024)**, organized by the **Department of Electrical Engineering**, NIT Meghalaya on 24th Feb. 2024.

Research Frontier

Awards, Recognition and Fellowship

- **Dr. Monalisa Biswal** was **Session Chair** at the **International Conference on Sustainable Power and Energy Research (ICSPER 2024)**, organized by the **Department of Electrical Engineering**, NIT Warangal.
- **Dr. Monalisa Biswal** was **Session Chair** at the **3rd International Symposium on Sustainable Energy and Technological Advancements (ISSETA 2024)**, organized by the **Department of Electrical Engineering**, NIT Meghalaya.

Sponsored Research Projects

- The project titled *Application of selective plant metabolites to modulate antibiotic efflux pump and inhibition of biofilm developed by antibiotic-resistant Escherichia coli liable for urine infection* by **Dr. D. N. Roy**, PI, and **Dr. Lata S. B. Upadhyay**, CO-PI has been sanctioned by the **Indian Council of Medical Research (ICMR)**, Government of India, Grant Rs. 47,25,497/- for a period of 36 months.

Ph.D. Thesis Defended

- **Mr. Rajesh Sonkar** defended his Ph.D. thesis entitled *Peak Particle Velocity Prediction using Soft Computing Techniques: A case study on an Infrastructure Development Project* on 23rd Nov. 2023 under the supervision of **Dr. P.Y. Dhekne**, Professor, DME and **Dr. Narendra D. Londhe**, Professor, EE.
- **Mr. Shashank Poddar** defended his Ph.D. thesis entitled *Surface Modification of Metallic Implants by Pure and Hybrid Titania Nanotube Arrays* on 29th Nov. 2023 under the supervision of **Dr. Sudip Kumar Sinha**, Assistant Professor, MME and **Dr. Arindam Bit**, Associate Professor, BME.
- **Mr. Shashikant Verma** defended his Ph.D. thesis entitled *Climate Change Impact Assessment on Reservoir Operation Policy of Mahanadi Reservoir Project Complex, Chhattisgarh* on 1st Dec. 2023 under the supervision of **Dr. A. D. Prasad**, Assistant Professor, CE, and **Dr. Mani Kant Verma**, Assistant Professor, CE.
- **Ms. Anuragi Arti Narayandas** defended her Ph.D. thesis entitled *Improving Automated Analysis and Learning of EEG Signals for Brain Disorders Detection using Fourier Bessel Series Expansion based Empirical Wavelet Transform* on 6th Dec. 2023 under the supervision of **Dr. Dilip Singh Sisodia** Associate Professor, CSE and **Dr. Ram Bilas Pachori**, Professor, EE, IIT Indore.
- **Mr. Dharamender Singh Saini** defended his Ph.D. thesis entitled *Effect of Nano-Particles on Tribological Properties of various Lubricants* on 8th Dec. 2023 under the supervision of **Dr. S.P.S. Matharu**, Professor, ME.
- **Mr. N.P. Guhan Seshadri** defended his Ph.D. thesis entitled *Functional Brain Network Analysis and Imaging in Dyslexic Children* on 12th Dec. 2023 under the supervision of **Dr. B. K. Singh**, Associate Professor, BME.
- **Ms. Priya Sarkar** defended her Ph.D. thesis entitled *Slow Flow Through an Axisymmetric Slip Particles* on 18th Dec. 2023 under the supervision of **Dr. Madasu Krishna Prasad**, Associate Professor, DoM.
- **Ms. Priyanka Sahare** defended her Ph.D. thesis entitled *Effect of Self-Heating on Electron Leakage and Efficiency Droop in AlXGa1-XN/GaN UV LED* on 20th Dec. 2023 under the supervision of **Dr. Bijaya Kumara Sahoo**, Professor, DoP.
- **Ms. Dhivya A.** defended her Ph.D. thesis entitled *Intensified Microfiltration Process for Fruit Juice Clarification and Aroma Recovery* on 20th Dec. 2023 under the supervision of **Dr. Amit Keshav**, Professor, DCE.
- **Mr. Rakshit Kumar Singh** defended his Ph.D. thesis entitled *An Integrated Solution Approach for Sustainable Disassembly Line Balancing Problem with Task Failure* on 26th Dec. 2023 under the supervision of **Dr. Amit Raj Singh**, Associate Professor, ME and **Dr. R.K. Yadav**, Professor, ME.
- **Ms. Priyanka Roy** defended her Ph.D. thesis entitled *Theoretical and Experimental Studies Towards Stable, Efficient and Non-Toxic Perovskite Solar Cells* on 29th Dec. 2023 under the supervision of **Dr. Ayush Khare**, Professor, DoP and **Dr. Sanjay Tiwari**.
- **Mr. Raja C.** defended his Ph.D. thesis entitled *Synthesis and Characterization of Ceramic Composite Membranes for Separation of Vanillin and Vanillic Acid* on 19th Jan. 2024 under the supervision of **Dr. J. Anandkumar**, Associate Professor, DCE.
- **Mr. Aniruddha Nilkanth Jogdande** defended his Ph.D. thesis entitled *Evaluation of utility of public parks Case Study: Raipur* on 2nd Jan. 2024 under the supervision of **Dr. Abir Bandyopadhyay**, Professor, DAP.
- **Ms. Priyanka Khanna** defended her Ph.D. thesis entitled *Towards Development of Feature Selection Techniques for Breast Cancer Risk Assessment*. on 16th Jan. 2024 under the supervision of **Dr. Mridu Sahu**, Assistant Professor, IT.

- **Mr. Shankarshan Prasad Tiwari** defended his Ph.D. thesis entitled *Machine Learning Based Protection Scheme for DC Microgrid Under Stressed Scenarios* on 19th Jan. 2024 under the supervision of **Dr. (Smt.) Ebha Koley**, Associate Professor, EE.
- **Mr. Ritesh Raj** defended his Ph.D. thesis entitled *Deep Learning-based CADx System for Full-body Psoriasis Diagnosis* on 29th Jan. 2024 under the supervision of **Dr. Narendra D Londhe**, Professor, EE.
- **Mr. Satish Kumar Dhurandhar** defended his Ph.D. thesis entitled *Numerical Simulation to Study the Effects of Mixing Vane Spacer on Flow and Thermal Characteristics of Fluid in Nuclear Fuel Channels* on 30th Jan. 2024 under the supervision of **Dr. Shobha Lata Sinha**, Professor, ME, and **Dr. Shashi Kant Verma**, Associate Professor, ME, NIT Durgapur.
- **Mr. Gopal Prasad Naik** defended his Ph.D. thesis entitled *Anaerobic Co-digestion of Rice Straw with Non-edible Deoiled seeds* on 31st Jan. 2024 under the supervision of **Dr. A.K. Poonia**, Professor, DCE and **Dr. P. K. Chaudhary**, Professor, DCE.
- **Mr. Yogesh Kumar Rathore** defended his Ph.D. thesis entitled *Classification of Fungal and Bacterial Leaf Diseases of Rice Plant using Machine Learning Techniques* on 31st Jan. 2024 under the supervision of **Dr. Rekh Ram Janghel**, Assistant Professor, IT.

- **Mr. Rahul Shrivastava** defended his Ph.D. thesis entitled *Development of Equitable Recommendation System using Multi-pronged Utility Functions* on 7th Feb. 2024 under the supervision of **Dr. Dilip Singh Sisodia**, Associate Professor, CSE and **Dr. Naresh Nagwani**, Professor, CSE.
- **Mr. Thummaluru Vikas Kumar Reddy** defended his Ph.D. thesis entitled *Stiffness Characterization of Unbound and Treated Granular Layers in Low Volume Rural Roads* on 19th Feb. 2024 under the supervision of **Dr. Sunny Deol Guzzarlapudi**, Assistant Professor, CE.
- **Mr. Sahu Ramgopal Tilakram** defended his Ph.D. thesis entitled *Regionalization of Mean Annual Precipitation, and Flood Forecasting in the Mahanadi River Catchment of Chhattisgarh state* on 21st Feb 2024 under the supervision of **Dr. Manikant Verma**, Assistant Professor, CE.
- **Ms. Padma Rani Verma** defended his Ph.D. thesis entitled *Fabrication of Hybrid Nanomaterials for Useful Photocatalytic Chemical Transformations* on 21st Feb. 2024 under the supervision of **Dr. Mrs. F Khan**, Professor, DoC and **Dr. Subhash Banerjee**, Assistant Professor, DoC, GGU Bilaspur.
- **Ms. Jayashri Mahapatro** defended his Ph.D. thesis entitled *Structural, Optical, Dielectric, and Electrical Properties of Modified M-Type Hexaferrite* on 28th Feb. 2024 under the supervision of **Dr. Sadhana Agrawal**, Professor, DoP.

Research Publications

- **Dr. D. N. Roy**, Assistant Professor, DBT, **Dr. N. Moktan**, Assistant Professor, Department of Microbiology, Dhruva Chand Halder College, and **Dr. A. Banerjee**, Assistant Professor, Department of Microbiology, St. Xavier's College received the acceptance of a book Chapter titled **Role of genetically modified organism in biodegradation and detoxification-current challenges and perspectives** for the upcoming book **Microbiome-assisted Bioremediation** to be published by Elsevier.
- **Dr. D. N. Roy**, Assistant Professor, DBT, **Dr. S. Nag**, Assistant Professor, Chemical Engineering, NIT Agartala, and **S. Datta**, Ph.D. Scholar, NIT Agartala received the acceptance of a Journal Article titled **Biofilm-producing antibiotic-resistant bacteria in Indian patients: a comprehensive review** for the upcoming Journal **Current Medical Research and Opinion** to be published by Taylor and Francis.
- **Dr. Monalisa Biswal**, Assistant Professor, EE along with **Dr. Vijay K Sood**, Department of Electrical, Computer and Software Engineering, Faculty of Engineering and Applied Science, Ontario Tech University, Oshawa, ON, Canada, **Dr. Saumendra Sarangi**, Assistant Professor, EE, MNNIT Allahabad and **Dr. Hassan Haes Alhelou**, Department of Electrical and Computer Systems Engineering, Monash University, Victoria, Australia received the acceptance for a book titled **Smart Metering: Infrastructure, Applications, Security, Methodologies and Challenges** to be published by Elsevier.
- **Dr. Monalisa Biswal**, Assistant Professor, EE and **Mr. Chinta Durga Prasad**, Research Scholar, EE along with **Dr. Papia Ray**, EE, VSSUT Burla, Odisha received the acceptance of a book chapter titled **Transmission Line Protection in Presence of High Penetration of Wind Energy: A Review on Possible Solutions** for the upcoming book **Electrical Engineering** to be published by Springer.
- **Dr. Monalisa Biswal**, Assistant Professor, EE and **Mr. Kumar Raja Andanapalli**, Research Scholar, EE along with **Dr. Papia Ray**, EE, VSSUT Burla, Odisha received the acceptance of a book chapter titled **Dynamic Threshold Supported Symmetrical Power Swing Technique for Modern Transmission Network** for the upcoming book **Chinese Journal of Electrical Engineering** to be published by IEEE.
- **Dr. Monalisa Biswal**, Assistant Professor, EE and **Ms. Ruchita Nale**, Research Scholar, EE along with **Dr. Nand Kishor**, Østfold University College, Fredrikstad campus, Norway, **J. Merino**, **A. Perez-Basante** and **J.E. Rodriguez-Seco**, Smart Grids and Energy Storage Area of TECHNICALIA, Derio, Spain received the acceptance of a book chapter titled **Real-Time Analysis of Islanding Detection Scheme Developed for AC Microgrid System** for the upcoming book **Electric Power System Research** to be published by Elsevier.
- **Dr. Monalisa Biswal**, Assistant Professor, EE and **Ms. Kiran Rana**, Research Scholar, EE along with **Dr. Richa Negi**, Professor, EE, MNNIT Allahabad and **Dr. Nand Kishor**, Østfold University College, Fredrikstad campus, Norway received the

acceptance of a book chapter titled **Fault Detection and VSC-HVDC Network Dynamics Analysis for the Faults in Its Host AC Networks** for the upcoming book **Applied Science** to be published by MDPI.

- **Dr. Sadhana Agrawal**, *Professor, DoP* and **Ms. Jayashri Mahapatro**, *Research Scholar* have published a journal titled **Effect of Eu–Er substitution on structural, optical, dielectric, and electrical properties of Ba_{0.5}Sr_{0.5}Eu Er Fe₁₂–2O₁₉ hexaferrite**. The journal was published in **Journal of Rare Earths**, Elsevier, January 2024.
- **Dr. Sadhana Agrawal**, *Professor, DoP* and **Ms. Jayashri Mahapatro**, *Research Scholar* have published a journal titled **Influence of erbium substitution on structural, optical, and dielectric properties of strontium hexaferrite**. The journal was published in **Bulletin of Materials Science**, Springer, January 2024.

Students' Corner

- **Team Technicatives, NIT Raipur** emerged as Grand Finalist for their selected problem statement at **SIH (Smart India Hackathon) 2023**, organized by **Government of India** from 19th to 20th Dec. 2023. at **PSNA College of Engineering and Technology, Tamil Nadu**. **Team Technicatives** consisted of **Aditya Prasad, Prerna Singh (Team Leader), 5th Sem., IT, D. Anuj Kumar, Harsh Dewangan, Mohit Doraiburu, 5th Sem., ECE, Bhupendra Kumar Gehlot, 5th Sem., DCE**. They developed an app for Railway Customer for facilitating real-time PNR status and station information in 26 Indian languages and dialects, Integrating AI4Bharat's language translation tools via the Government of India's Bhashini Program. The app will be featuring soon on Google Play Store.
- **Harshit Jajodia, Prakanshul Saxena, Madhur Bhattad, Gagan Raj Gupta, Ayush Chouksey and Arijeet Dutta** have been granted a patent for the invention of *A Hand-Held Operational Fungus Imaging Device* on 22nd Dec. 2023 with **IIT Bhilai and NETR AI Pvt. Ltd.** as Patentee for a term of 20 years from the date of 12th Jan. 2023 by the **Patent Office, Government of India**.
- **Nrityam – The Dance Club of NIT Raipur**, participated in **Dance Odyssey**, an Inter-College dance competition organized by **RANG - The Cultural Committee**, during **Karmaanta 2024**, the annual fest hosted by **IIM Raipur** on 14th Jan. 2024. **Team Nrityam's Pradnya Manmode, Tarini Vaishnaw, Rahul Dewangan, Karuna Singh, Akshay Dev, Tejas Sinha, Aryan Nag, Prachi Ghosh, Preeti Sao, Niyati Patodia, Swara Mandale, and Gungun Ojha**, won Dance Odyssey, impressing judges with their precise execution. Their success at **Karmaanta 2024** highlights their dedication, enriching NIT Raipur's cultural scene.

NIT Raipur Students Excel in GATE 2024

| Student | AIR | Student | AIR | Student | AIR | Student | AIR |
|--------------------------|-----|---------------------------|-----|----------------------------|-----|----------------------------|-----|
| Aniket Kumar Gupta (DME) | 03 | Dakshesh Amrit (DME) | 48 | Yogendra Kumar Patel (DME) | 58 | Saurabh Kumar Rai (DME) | 62 |
| Gautam Raghvani (DME) | 80 | J. Abhinandan Gupta (ECE) | 120 | Ayushman Singh (EE) | 303 | Dhulipala Karthikeya (ECE) | 386 |

Students of **NIT Raipur** have once again proven their worth by giving a commendable performance in the **Graduate Aptitude Test in Engineering (GATE) 2024**, the results of which were released on 16th Mar. 2024 by the **Indian Institute of Science (IISc) Bengaluru**. The students at the Institute brought laurels by securing good ranks in GATE 2024. **NIT Raipur** congratulates them and wishes them success in the future.

Placements 2023-24

- **Gaurav Patel, 7th Sem., IT, Mohd Harris Qureshi, 7th Sem., IT, Sumit Kumar, 7th Sem., CSE, and Arvind Kumar, 7th Sem., ECE, Soumyak Panigrahi, 7th Sem., CSE and Amit Dey, 7th Sem., CSE** grabbed **Pre-Placement Offers (PPOs)** for the role of **Software Engineer (SWE)** and **Apoorv Mathur, 7th Sem., IT, Ketan Rambhau Puyad, 7th Sem. ECE**, grabbed Pre-Placement Offers (P.P.O.s) for the role of **Software Development Engineer (SDE)** in **VISA Inc.**

- **Hridam Palve**, 7th Sem., IT, **Asmita Sharma**, 7th Sem., EE, **Prashansa Gupta**, 7th Sem., ECE have received **Pre-Placement Offers (PPOs)** for the role of **Software Engineer (SWE)** and **Aditya Srivastava**, 7th Sem., IT and **Sakshi Agrawal**, 7th Sem., IT have received **Pre-Placement Offers (PPOs)** for the role of **Software Development Engineer (SDE)** in **Microsoft Corporation** of 55 LPA CTC.

Club/Committee Activities

Nukkad Natak by Abhinay



Abhinay - The Dramatics Club, NIT Raipur unfolded a **Nukkad Natak** the central garden themed under the **Voter Awareness Campaign** on 13th Mar. 2024 under the supervision of **Dr. Govardhan Bhatt**, *Faculty In-charge, Abhinay*. which not only underscored the significance of thoughtful leadership selection but also debunked common excuses for abstaining from voting, urging citizens to fulfill their democratic responsibility. NIT Raipur thus endeavored to instill a sense of civic duty and active citizenship, catalyzing a wave of responsible electoral engagement among the student community and beyond.

Finance and Consulting Club Activities

Mudra- The Finance Centric event by FCC



Finance and Consulting Club, NIT Raipur organized its Flagship event **Mudra** on 27th Jan. 2024. This comprehensive event encompassed a **Speaker Session**, a stimulating **Business Quiz**, **Money Haul- A Mock Trading Competition**, and a **Case Competition**. The Guest Speaker of the event was **Mr. Abhishek Gupta**, *Founder, AB classes*. The event was coordinated with the skilful direction of **Dr. Anoop Kumar Tiwari**, *Faculty In-charge, FCC*.

The speaker session started with a warm welcome of the Guest Speaker. **Mr. Gupta**, who stressed the importance of initiating preparation during college and elaborated on various MBA specializations and delved into the subjects essential for success in the CAT exam, while addressing the fundamental question of whether pursuing an MBA aligns with individual aspirations. The session concluded successfully with the presentation of a memento to the Guest Speaker. An online case competition

called **Case-o-Maze** was also conducted which required participants to analyse a business scenario, pinpoint crucial issues, and present strategic solutions while a week-long **Mock Trading** competition was organized which allowed the participants to execute trades, analyse market data, and test their investment strategies. The culmination of the event was marked by an interactive **Business Quiz**, which showcased a spirited display of students' expertise on various business facets. **Team ABD360** stood 1st while **Team XOR** stood 2nd and **Team Laxmi Cheat Fund** stood 3rd. The event ended with discussions on market trends, risk management, and emerging opportunities.

Speaker Session on Financial Literacy and Awareness



Finance & Consulting Club, NIT Raipur collaborated with the **Reserve Bank of India (RBI)** to organise a **Speaker Session on Financial Literacy and Awareness** on 23rd Feb. 2024, during **Eclectika'24**. Chief Guests included **Mr. Satya Prakash Soni**, *AGM, RBI*, **Mr. Gajendra Sahu**, *AGM, RBI*, **Mrs. Aditi Dubey**, *AGM, FIDD*, and **Mr. Digvijay Raut**, *Regional Literacy Officer and manager, FIDD Chhattisgarh*. Expert insights were shared on various financial topics, enhancing the audience's understanding of crucial financial concepts.

AVINYA'24 by I-CELL



Innovation Cell (I-Cell), NIT Raipur conducted **AVINYA'24** on 9th Feb. 2024 at **Deendayal Upadhyay (DDU) Auditorium**, organized under the supervision of **Dr. Saurabh Gupta**, *Faculty In-charge, I-cell*. **Team I-Cell** embarked on an

exhilarating journey with the Flagship event themed **Magic of Science – Unlock the Chamber of Secrets**. and consisted of multiple events including several talks by eminent speakers, Innovation Expo, and Start-up Pitching. The event featured speakers including **Mr. Ajay Kumar Agrawal**, Director, DBOI, **Akshay Makar**, Founder *Climatenza Solar*, *Forbes 30 under 30*, **Akash Agrawal**, Founder, *Zoff Foods*, featured on *Shark Tank*, **Deepak Pareek**, Co-founder, *Iceberg Creations*, *Impact 30 under 3*, and **Sameer Ranjan**, Director (*Data Science*), *Catenate*. Topics spanned from **Finance, Innovation, Renewable Energy, Technology, and Data Science**. The comprehensive sponsorship lineup, with CSPDCL ensured a strong foundation for the event's success. Each sponsor and partner, such as **StockGro, Rathore Tour and Travels, Synogics, Social Spark, CoverHub, and Laxmi Electricals**, contributed to the event's diversity and richness. The Chief Guest of the event was **Mr. Ritesh Agrawal**, IAS, CEO, *Chhattisgarh infotech promotion Society (CHIPS)* and Guest of Honor was **Mr. Job Zachariah**, Chief, *UNICEF Chhattisgarh*. Special Guests included **Dr. (Mrs.) A. B. Soni**, Director(I/C), *NIT Raipur*, **Dr. Samir Bajpai**, Head, *CDC*. The esteemed speakers for the talks consisted of **Mr. Ajay Kumar Agrawal**, Director, *Deutsche Bank Operations International (DBOI)*, **Mr. Akshay Makar**, Founder, *Climatenza Solar*, **Mr. Akash Agrawal**, *Zoff Foods*, **Mr. Deepak Pareek**, Co-founder, *Iceberg Creations*, **Mr. Sameer Ranjan**, Director (*Data Science*), *Catenate*. The event commenced with the lighting of the ceremonial lamp, and esteemed guests were warmly welcomed. **Dr. Samir Bajpai** elaborated on the essence of *Avinya*. He emphasized their pivotal role in fostering holistic development among students. **Dr. (Mrs.) A. B. Soni**, emphasizing the significance of innovation, highlighted its crucial role in bringing positive changes to society. Similarly, **Mr. Job Zachariah** discussed factors influencing the nation's GDP, and discussed the importance of startups and incubation hubs. **Mr. Ritesh Agrawal**, motivated students to strive for innovation, sharing insights on the government's efforts to promote the startup culture.

Mr. Akash Agrawal addressed various startup-related concerns, highlighting that if one has good ideas, numerous investors will come forward for funding. Concluding the session, **Mr. Akash** addressed students' queries, sharing challenges faced and solutions implemented in starting his own startup venture. **Mr. Ajay Kumar Agrawal** reiterated that success entails leading a content life and emphasized on enhancing problem-solving skills to effectively tackle any job-related challenges in the future. **Mr. Deepak Pareek** advised against chasing perfection, suggesting instead to focus on progress and growth. **Mr. Akshay Makar**, Founder,

Climatenza Solar stressed the importance of being proactive in solving one's own problems, indicating that taking ownership of challenges is essential for personal and professional growth. **Mr. Sameer Ranjan** underscored the significance of cultivating both technical skills and soft skills in tandem. The closing ceremony witnessed captivating performances by **Abhinay- the Dramatics Club**, while **Raaga- the Music Club**, mesmerized the audience with their melodic presentations. Additionally, a stand-up comedy session performed by **Kshitij Sharma** added a touch of entertainment to the event. Following a vote of thanks by the Overall Coordinator of the **Innovation Cell**, the program concluded on a high note, leaving the attendees with fond memories of the enriching experience. **Dr. Saurabh Gupta** concluded the inaugural ceremony of *Avinya* by extending best wishes to the **I-Cell** for the successful organization of the event.

I-Quest by Interact



Interact - The Quiz Club, NIT Raipur conducted the Tenth edition of I-Quest on 25th Feb. 2024. The competition featured two rounds with questions covering various topics. The event witnessed active participation, and winners included **Sathvik Jaiswal**, 2nd sem., *ECE* and **Prajwal Kambale**, 2nd sem., *IT* with **Gurdev Singh**, 8th sem., *MME*, and **Aditya Kumar Dubey**, 8th sem., *EE*, as runners-up.

Tube Trolls 3.0 by Literati



Literati - The literary committee of NIT Raipur, hosted **Tube Trolls 3.0**, an intellectual event, on 24th Feb. 2024. The program adopted a parliamentary debate model marked by eloquence and wit. It comprised multiple rounds where participants debated issues and presented various viewpoints. The impassioned rhetoric and fervent exchanges echoed within the venue's halls.

Motorsport's IgNITRR at SAE e-BAJA 2024

Team IgNITRR – The Motosports Club, NIT Raipur, participated in the nationwide electric vehicle off-road racing

event e-BAJA organized by the Society of Automotive Engineers (SAE) India at Hyderabad, in the EV Category from 6th to 11th Mar. 2024.



As a pre-event display, the electric vehicle was showcased in front of **Dr. N. V. Ramana Rao**, Director, NIT Raipur, and faculty members of the Department of Mechanical Engineering (ME).

NSS Activities

Celebration of National Youth Day



National Service Scheme (NSS), NIT Raipur orchestrated a captivating program on the auspicious occasion of **National Youth Day**, aligning with the visionary Viksit Bharat @2047 scheme of the Ministry of Youth Affairs. The event took place on 12th Jan. 2024, at the esteemed institution's **Dr. APJ Abdul Kalam Hall**, radiating under the able guidance of **Dr. Govardhan Bhatt**, Faculty In-charge, Team NSS. The distinguished gathering was graced by **Swami Praptyananda**, Auditor, Vivek Patrika, as the Guest Speaker. The event saw the esteemed presence of **Dr. N.V. Ramana Rao**, Director, NIT Raipur, who was the Chief Guest, and **Dr. Anoop Tiwari**, Associate Professor, DHSS, who was the Guest of Honor. The ceremony commenced with a gracious welcome, as **Dr. Govardhan Bhatt** presented shawls and saplings to the esteemed guests. An engaging speech competition showcased students' perspectives on youth and future generations. **Dr. Govardhan Bhatt's** welcome set the tone. The event featured a group singing performance and a thought-provoking drama by **Abhinay- The Dramatics Club**. **Dr. N.V. Ramana Rao** discussed Swami Vivekananda's thoughts on character-building. **Dr. Bhatt** honoured **Swami Praptyananda** with a memento. **Mr. Vaibhav Sawant** concluded with gratitude to all participants, marking the success of the National Youth Day celebrations.

Voter Awareness Campaign by NSS



National Service Scheme (NSS), NIT Raipur organized a **Pledge Ceremony** on 13th Mar. 2024 to encourage students to participate in the Upcoming **Lok Sabha elections**. The event was graced by esteemed guests, including **Dr. N. V. Ramana Rao**, Director, NIT Raipur along with **Dr. Shrish Verma**, Dean (Academics) and **Dr. Nitin Jain**, Dean (SW). Under the guidance of **Dr. Govardhan Bhatt**, Faculty Advisor, NSS, the program aimed to align with the nationwide *Chunav Ka Parv* and *Mera Pehla Vote Desh Ke Liye* campaigns initiated by the **Ministry of Education**, **Ministry of Youth Affairs**, and **Election Commission of India**. **Dr. Rao** emphasized on the role of young people in voting, stating them as the torchbearers for the future of India and urged everyone present to pledge their commitment to actively participate in the electoral process without being influenced by any considerations of religion, race, caste, or language. Attendees pledged to make informed decisions based on the issues affecting their communities, nation, and the world. They also vowed to stand against corruption, injustice, and inequality, using their votes as tools for positive change.

Matribhasha Mahotsav 2024 by Rajbhasha Samiti

Rajbhasha Samiti, NIT Raipur organized a series of competitions on **Matribhasha Mahotsav 2024** from 15th Feb. to 5th Mar. 2024. Online events like poetry writing, Treasure Hunt, and Short Video competitions were organized on the Unstop app. Participants from all over India were invited to participate with the aim of promoting Hindi and other regional languages. The winners were announced on 5th Mar. 2024, and awarded prizes and certificates. The event was organized under the guidance of **Dr. S. M. Saini**, Professor In-charge, Rajbhasha Samiti.

Blood Donation Camp by Sahyog



Sahyog- The Mentorship club, NIT Raipur organized a **Blood Donation Camp** on 26th Jan. 2024 on occasion of the 75th Republic Day. The event was graced by **Dr. N. V. Ramana Rao**, *Director, NIT Raipur*. **Dr. Nitin Jain**, *Dean (SW)*, **Dr. D. Sanyal**, *Dean (Faculty Welfare)* along with the esteemed presence of **Mr. R. K. Sahu**, *Ex-Indian Navy Officer*, **Dr. Dhananjay Sahu**, *Blood Transfusion Officer*, and *Blood Bank In-Charge, AIIMS Raipur*, **Dr. Sudin Pal**, *Medical Officer, Bhimrao Ambedkar Memorial Hospital* and **Dr. Ritu Jain**, *Homeopathic Specialist*. The event was conducted under the guidance of **Dr. Ravi K. Jade**, *Faculty In-Charge, Sahyog*. **Dr. Rao** emphasized the importance of blood donation for enhancing cardiovascular health and boosting blood cell production while encouraging student involvement, he highlighted the societal impact of such efforts and expressed gratitude to the supportive doctors, underscoring their vital role in the event's success and reinforcing a shared commitment to community well-being. This year, the event took a stride further by collaborating with the **All-India Institute of Medical Sciences (AIIMS) Raipur** and **Bhimrao Ambedkar Memorial Hospital**. The blood donation camp was a resounding success, demonstrating strong community solidarity with overwhelming participation. In addition to blood donation, the event provided complimentary eye check-ups and free homeopathic consultation by **Dr. Ritu Jain**. The initiative resulted in over 250 units of donated blood, highlighting the institute's commitment to communal well-being, and promoting a comprehensive vision of healthcare, emphasizing collective philanthropy's profound impact on compassion and health advocacy.

Sanskriti Committee Activities

Uttarayan'24 by Sanskriti



Sanskriti - The Cultural Committee of NIT Raipur celebrated **Uttarayan'24** on 12th Jan. 2024. The event was organized under the supervision of **Dr. Lata Upadhyay**, *Faculty In-Charge, Sanskriti* and coordinated by the members of the committee. The event was graced by the presence of **Dr. N.V. Ramana Rao**, *Director, NIT Raipur*, **Dr. Nitin Jain**, *Dean (SW)*, **Dr. Govardhan Bhatt**, *Assistant Professor, CE*, and various faculty members of the Institute. The aim of the event

was to create a joyful and inclusive environment that can enhance community spirit while providing a platform for students to connect with their heritage. Kites were distributed to the students and the faculty members. They showed great zeal and enthusiasm in flying them. The event ended, promoting unity among diverse student groups, educating the significance of the festival, and encouraging a sense of pride in cultural identity.

Eclectika'24



Sanskriti- The Cultural Committee, NIT Raipur organized cultural fest, **Eclectika'24** from 23rd to 25th Feb. 2024. The 3-day long fest was organized under the guidance of **Dr. Lata Upadhyay**, *Professor In-charge, Sanskriti*. The mega events include **Kalopsia - Painting Competition**, **Clash of Choreos - A Group Dance Competition**, **Goonj - Nukkad Natak Competition**, **Eclectika Idol - A Singing Competition**, **Tafree - Stand-Up Comedy Competition**, **Allure - A Fashion Show** and **Avirbhav - A War of Bands**. In addition to the mega-events, there were about 30 mini events such as **Pixel Lane** by **Click Club**, **Tube Trolls**, **Paper Topia**, **Bottle Art**, **Face Painting**, **Rangoli Competition**, **Essay Competition** etc. The nights of Eclectika'24 included **EDM Nite**, an **Artist Nite**, and a **Cultural Nite** which featured performances by both artists and students. **Dr. N. V. Ramana Rao**, *Director, NIT Raipur* was the Chief Guest at the inauguration ceremony. **Dr. Samir Bajpai**, *Head, CDC*, **Dr. P. Y. Dhekne**, *Registrar*, **Dr. Shubhashis Sanyal**, *Professor, ME*, and **Dr. Prabhat Diwan**, *Dean (R&C)*, were present at the occasion as Special Guests and other faculty members, participants and judges of events were also present. **Dr. Diwan** appreciated and recognized the pioneering contributions of **Dr. S. Sanyal** and **Dr. Bajpai** in shaping the cultural landscape of the institute. **Dr. S. Sanyal** commended the faculty and coordinators for orchestrating an event of such grandeur, emphasizing the invaluable lessons of leadership and management ingrained in such endeavors. **Dr. Bajpai** emphasized the rapid pace of technological evolution and the imperative of adapting to change and advocated for the acquisition of soft skills, affirming fests as fertile grounds for their cultivation and enhancement.

Day 1 of the fest witnessed multiple Mega-Events such as **Kalopsia- an art competition and exhibition** in which **Smriti Ranjan**, *AAFT University* secured 1st position, **Khusboo**, *AAFT University* bagged 2nd and **Priyanka Sahu**, *NIT Raipur* bagged 3rd position, **Goonj- the Nukkad Natak** in which **AAFT University** and **NIT Raipur** joint handedly coveted 1st position,

Clash of Choreos - The Dance competition in which **Cross group - Cross crew Dance** bagged 1st position, **Deepak Sahu, Disha College** bagged 2nd position and **Anshika, Maharaja Agrasen College** secured 3rd position. Additionally, mini events, like **Hand Painting, Jenga, Am I Worthy? Pixel Lane, Create your Own Superhero, NITRR Got talent** etc. were also conducted which amassed lots of participants. The ultimate event of the Day was EDM Night where students showcased their dance moves and enjoyed the vibrant atmosphere.

Day 2 of the fest commenced with **Eclectika Idol**, a showcase of vocal talent. Participants from various universities filled the venue with melodies, creating an atmosphere that celebrated the universal language of music. **Tafree**, the Standup comedy extravaganza witnessed Talented participants, exuding grace and confidence, claimed the stage with their comedic prowess. **Go Green - The Eco-Social Committee** curated a series of engaging events. Igniting creativity and environmental consciousness, a **Handicraft Painting Workshop** set the stage which was graced by **Geeta Tank, Clay art expert** and **Nirali Tank, Drawing expert**. An **Eco Quiz** followed, probing students' profound environmental knowledge. **Divypratap Singh** and **Apoorv Shekhar** clinched 1st position, while **Mohammad Shamshul Qamar** and **Manish Singh Meena** secured 2nd place. **Surbhi Pandey** and **Vaishnavi** earned the 3rd position. **Snake Mania** captivated public awareness regarding the enigmatic world of slithery reptiles, fostering a newfound appreciation and understanding of these fascinating creatures. **Mr. M. Suraj, President, Nature Welfare Society, Chhattisgarh**, along with his team enlightened the attendees with insights into diverse snake species, their venom, and preventative measures for snakebites. The symposium reached its zenith with Honor the Heroes, a discourse on wildlife conservation. Nature enthusiasts expounded on the critical need to preserve our endangered wildlife. The event showcased **Bunch of Fools**, a seven-member organization, sharing their journey to becoming environmental champions. Various mini fun events were also organized including **Paper Topia, Bottle Art, Ball Balance** which witnessed large footfall. The grand finale of the day unfolded with the enchanting **Cult Nite** under a starry canopy which witnessed a spectacular showcase of talent as students took the stage with singing, dance, and yoga performances. The night sparkled not only with celestial luminosity but also with the radiant talents of our students, culminating in a memorable and vibrant celebration.

Day 3 began with **Allure**, the event was graced by the presence of **Dr. Treena Minz, M.S. (Surgery) and Miss East India 2022**. The contestants from four different colleges went through a rigorous two round shortlisting, showcasing their talents and expressing their unique personalities through their style. The winners of the event were **Shruthi Baghel** at 1st place, **Aditya Mishra** at 2nd and **Sulagna Biswas** at 3rd position. **Avirbhav**, a competition between bands, witnessed participant teams from five different colleges captivated the audience with the harmony

of instruments. **Mr. Ankit Blesson** was the judge of the event. **The Technicians** secured 1st position while **WHOOTHE Band** secured 2nd position. The day witnessed numerous mini events like **Rangoli Making Competition, Pixel Lane, Face Painting, Dart, an Essay Competition and Escape Room**. In the **Artist Night**, **Yasser Desai** took the center stage to mesmerize the audience with his performance. The fest came to an end leaving memories for a lifetime.

Samar 2024 by Shaurya



Shaurya-The Sports Committee, NIT Raipur organized **SAMAR**, institute's annual sports fest from 18th to 21st Jan. 2024. **Dr. N.V. Ramana Rao, Director, NIT Raipur**, presided as the Chief Guest, joined by special guests **Dr. R.K. Tripathi, Dean (P&D)**, **Dr. Mithlesh Atulkar, In-charge Registrar** and **Dr. N.K. Jain, Dean (SW)**. **Dr. H.K. Narang, Faculty In-charge, Shaurya**, provided guidance for the organization of this sports fest. **Dr. R. K. Tripathi** underscored the significance of sports in shaping an individual's path to success, emphasizing the mantra of being of sound mind and body. **Dr. Jain** emphasized the importance of enjoying sports without the burden of work-related stress, drawing inspiration from the historic 1983 World Cup match for cricket, he highlighted the lesson of never giving up, urging perseverance. **Dr. Atulkar** elaborated on the symbiotic relationship between a healthy body and a sharp mind, defining success as the progressive realization of a worthy goal. **Dr. N.V. Ramana Rao** addressed the gathering, exploring the alignment of sports with the National Education Policy (NEP) and emphasizing its pivotal role in scholastic development and the cultivation of willpower. He underscored the multifaceted benefits of sports, such as the development of reasoning skills, nurturing leadership qualities, enhanced academic focus, and social development. The closing ceremony was graced by the presence of the Chief Guest **Mr. Rustum Sarang, International Weightlifter** and Guest of Honour, **Dr. A.B. Soni, Professor, DoC**, **Dr. Nitin Jain, Dean (SW)** and **Dr. D. Sanyal, Dean (FW)** along with esteemed faculty members of the institute. **Dr. Jain** highlighted the paramount importance of diverse sports participation. **Dr. Soni** emphasized the role of sports in shaping character in today's dynamic life, asserting its significance alongside education and moral values, while encouraging the assembly to embrace life's tapestry woven with threads of victory and defeat with positive fortitude. **Dr. D. Sanyal** delivered a discourse highlighting the significance of maintaining an active lifestyle in today's predominantly sedentary world. **Rustum Sarang's** impassioned reflection on

his 23-year sports journey emphasized the dual purpose of sports in promoting individual well-being and national glory. Despite pandemic challenges, he celebrated the unwavering commitment of over 100 athletes preparing for the Tokyo Olympics, urging others to be beacons of accomplishment and support in the collective pursuit of excellence. SAMAR 2024 presented a variety of sports in both intercollege and intra-college categories. In the intercollege category, winners of football and volleyball were **Kalinga University** and **Rungta College** respectively, while kabaddi and basketball were dominated by **NIT Raipur**. In the interbranch girls' category table tennis was clinched by the **DME** and **DoA**, while the **DCE**, **EE** and **ECE** emerged victorious in badminton and volleyball respectively. In the interbranch boys' category, **CE**, **CSE** and **MME** won in volleyball, the **MME** and **BME** won in badminton while table tennis was triumphed by the **DME**, **DoA**, **MME** and **M.Sc.** The prize distribution ceremony was followed by memento presentation to the Chief Guest and the event concluded with a vote of thanks by **Dr. H.K. Narang**, highlighted the societal impact of such efforts and expressed gratitude to the supportive doctors, underscoring their vital role in the event's success and reinforcing a shared commitment to community well-being.

Ramotsav by Think-India



Think-India Club, NIT Raipur organised **Ramotsav: Ram Lalla Pran Pratishtha** on 22nd Jan. 2024. The event was graced by the presence of **Prof. N.V Ramana Rao**, *Director, NIT Raipur*, who served as the Chief Guest while **Shri Girish Kuber**, *Hit Raksha Pramukh, Akhil Bharatiya Vanvasi Kalyan Ashram* as Guest of honour and **Shri Vikas Sharma**, *Public Relation Officer, CSPDCL* as a Special Guest. The function was organised under the guidance of **Dr. Meena Murmu**, *Faculty In-charge, Think India*. The festivities kicked off with a spectacular **Rangoli Competition**, where participants showcased their artistic prowess by depicting scenes from the Ramayana. The moment of national significance unfolded as the **Prime Minister of India**, in a live telecast, presented the consecration ceremony from Ayodhya. The entire institution gathered to witness this historic event, symbolizing the unity and reverence for cultural heritage shared by the Institute. **Shri Vikas Sharma** encouraged the students to become *Purushottam*

like Shree Rama and follow the path of truth and dharm. **Dr. Rao** focused on the statement that *Rama is the truth, and the only truth is Rama*. The program concluded on a high note by presentation of mementos to the guests and distribution of prizes of *Rangoli* competition. With a soul-stirring Bhajan Sandhya, where devotional songs echoed through the campus. The event concluded in the evening, as the campus came alive with the lighting of 2100 lamps, symbolizing the triumph of light over darkness.

Heritage Walk participation by Yuva



Yuva- The Tourism Club, NIT Raipur participated in a Heritage walk conducted by the **Tourism Ministry, Govt. of India**, on 2nd Feb. 2024. The walk was organized under the guidance of **Dr. Govardhan Bhatt**, *Faculty In-charge, Yuva & Tourism* and in presence of **Dr. Aparna Sharma**, *Faculty, CE*. The Objective of this Heritage Walk was to provide students a unique opportunity to appreciate Raipur's rich heritage through a visit to the Historic Purani Basti, which has been home to cultural institutions, ranging from the Jaitu Sav Math to the Naagari Das temple to the Turi-Hatri. The tour was guided by **Mr. Shivam Trivedi**, *founder of Heritagewala* and the students were accompanied by **Mr. Mayank Dubey** and **Miss Radhika Sharma**, courtesy the Ministry of Tourism.

School Students Visits NIT Raipur by Unnat Bharat Abhiyan (UBA)



Unnat Bharat Abhiyan (UBA), NIT Raipur organized a one-day Institute Visit for the students of **Aakanksha Awasiya Vidyalay, Janjgir**. The educational visit comprised 80 students accompanied by teachers and included guided tours. The Students were exposed to various departments, research labs and classrooms of the Institute for better understanding and inspired them to pursue a path toward the same.

Contribution to the Institution

Donations

- **NIT Raipur** expresses sincere gratitude towards **Shri Amitava Sur** (*Mech/1970*) who has made a generous donation to the Institute.

Appeal

Ever since its establishment in 1956, the institute has been serving and maintaining steady progress to achieve a unique feat in the highly competitive area of engineering and technology. To focus on cutting-edge multidisciplinary and frontier areas of engineering and technology as well as innovation-based research, a strong and continuous financial support from alumni, faculty members, students and all well-wishers is the need of the hour. All the stakeholders of the Institute have a major role in building a corpus fund to support various teaching and research infrastructures, and other allied facilities for the welfare of students. NIT Raipur appeals to all alumni, faculty members, students, and well-wishers for their contribution to the NIT Raipur Donation Fund. **The financial donation is exempted under section 80G (5) (vi) of the Income Tax, 1961 Vide IT Order Number ITBA/EXM/S/80G/2019-20/1015830613(1) dated 29/04/2019.**

How to Contribute:

The payment may be made either online (<https://www.eduqfix.com/OnlineForms/nitrdfform/add>) or directly into the bank account of "NIT Raipur Donation Fund".

Name of the Account: NIT Raipur Donation Fund

Account Number: 50100254910087

Name of the Bank: HDFC Bank, Tatibandh Branch, Raipur

IFSC Code: HDFC0003692

Follow us on:



EDITORIAL TEAM

FACULTY MEMBERS



Dr. N. D. Londhe
(Chairperson, PMRC)



Dr. L. K. Sahu
(Member, PMRC)



Dr. S. K. Tarai
(Member, PMRC)



Dr. C. S. Rajput
(Member, PMRC)



Dr. V. K. Vidyarthi
(Member, PMRC)



Mr. T. Bhawar
(Office Coordinator, PMRC)

STUDENTS



Aditya Kumar Dubey
(EE, 8th Sem.)



Neha Gaikwad
(IT, 8th Sem.)



Pragati Agrawal
(EE, 8th Sem.)



Manthan A. Ghodeswar
(BME, 6th Sem.)



Amarram Madhu M.
(BME, 6th Sem.)



Pankaj Kumar Chandra
(DCE, 6th Sem.)



Ananya Srivastava
(CSE, 4th Sem.)



Dolly Nagwani
(BME, 4th Sem.)



Diksha Manghrani
(DBT, 4th Sem.)



Anurag Yadu
(ME, 4th Sem.)



Tejas Surya
(IT, 2nd Sem.)



Kritarth Karambelkar
(BME, 2nd Sem.)



Sameer Srivastava
(DBT, 2nd Sem.)



Anushk Singh
(IT, 2nd Sem.)