QUARTERLY GLIMPSES

14th CONVOCATION

FOUNDATION DAY

SPORTS COMPLEX INAUGURATION

SHRUTI 2024

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NIT RAIPUR IN MEDIA

कृत्रिम मेधा इस वक्त पूरे विश्व के लिए प्राथमिकता वाला क्षेत्र बना : राष्ट्रपति मुर्मू

एनआइटी में इनडोर स्पोर्ट्स कांप्लेक्स का शुभारंभ

नईदुनिया प्रतिनिधि, रायपुर : समग्र इस अवसर पर डा. सुरेश हावरे ने लकड़ी के फर्श के साथ बैडमिंटन

रिसर्च के लिए एनआईटी व भूजल संस्थान के बीच एमओयू

NIT Raipur hosts 2nd Intl AI Computing Conference

NIT, NITTTR sign MoU for institutional collaboration

| WORKSHOP |

Workshop to foster tie-up between NIT and industries

#MouTime — दोनों संस्थाओं के प्रमुखों ने एमओयू पर किए हस्ताक्षर

स्टार्टअप के लिए एनआईटी-आईजीकेवी की एकजुटता

एमओय से ये फायदे होंगे

एनआईटी में जनजातीय गौरव दिवस का हुआ समापन

अमन पथ न्यूज

संगीतमयी शाम ने दर्शकों का मन मोह मोहा

इंजीनियरिंग स्टूडेंट्स का 'लव मैशअप'

रेट्रो गानों में खोए एनआईटी प्रोफेसर्स

विविधता में एकता का एहसास

कार्यक्रम के अंतर्गत पेश किए गए कई गीतों ने दर्शकों को

कोड उत्सव 8.0 में एफआरसीसी मुंबई की टीम '4आई' बनी विजेता

एनआईटी रायपुर के कोडिंग क्लब व ट्यूरिंग क्लब ऑफ प्रोग्रामर्स का आयोजन

NIT: स्टूडेंट्स ने तैयार किया स्मार्ट इलेक्ट्रोलाइट मॉनिटरिंग सिस्टम

CM inaugurates Harit Shikhar Sammelan

■ Staff Reporter
RAIPUR, Oct 3

cultural heritage alive.
Another highlight was the

15 faculties from NIT feature in Top 2% World Scientists Ranking of Stanford University

WORKSHOP BY 'ROBOTIX CLUB'

NIT : Workshop on Human-Computer Interaction and Robotics Vision held

#FoundationDay — एनआईटी के स्थापना दिवस पर टेलीकॉम सर्कल के सीजीएम बोले

चुनौतियों को अपनाएं, कम्फर्ट जोन से बाहर निकलें युवा

ZOOM रिपोर्टर — एनआईटी रायपुर के निदेशक एनवी — इन्हें मिले पुरस्कार

| WORKSHOP ON 'IOT-HEALTH' |

Workshop on IoT-Health inaugurated in NIT

स्वास्थ्य विभाग ने एनआईटी के सहयोग क्लब के साथ मिलकर रोहिणीपुरम तालाब की सफाई

एनआईटी में ली भ्रष्टाचार से दूर रहने की शपथ

नईदुनिया (वि.) रायपुर: राष्ट्रीय संस्कृति से राष्ट्र की समृद्धि है। विरोध करने प्रतिज्ञा दिलवाई। परे

इनोवेशन टाइम: एनआईटी के स्टूडेंट्स ने आईओटी इंटीग्रेशन से बनाया स्टैंड, जीते पुरस्कार

स्मार्ट सिस्टम बताएगा ग्लूकोज बोतल बदलनी है

Various events marks Swachhta Hi Seva, Hindi Pakhwada at NIT

■ Staff Reporter
RAIPUR, Sept 17

NIT Raipur is organising

paign being run under Swachhata.
NIT Raipur's Rajbhasha Samiti is also organising Hindi

NITRRFIE, MNNIT Allahabad sign MoU to promote incubation related activities

एनआईटी रायपुर में श्रुति २०२४ का भव्य आयोजन संगीतमयी शाम ने दर्शकों का मन मोह मोहा

| NATIONAL CHEMICAL CONFERENCE |

NCNE-2024: NIT Raipur's National Chemical Meet

My Dear Esteemed Colleagues and Stakeholders of NIT Raipur Fraternity, Happy New Year.

New year does not signify a simple change in the calendar but it also signifies opportunities for bringing about positive changes to make your work place and eventually the world around you much better. Let us welcome this New Year with open hearts and a shared commitment to contribute positively to the growth and reputation of NIT Raipur. Together

let us strive to enhance knowledge, foster growth and development in the Society. The New Year is the new beginning of new ventures and new projects. Let's continue to see the success as we did last year. Wishing all my employees a very happy and prosperous new year. Let New Year be the year when you come through as a good example for others around you at work. Ring out the old but do not lose the lessons of the past that will make you better at work in the future. Shedding tears over missed opportunities of the year gone by might cloud your vision and may cause you to miss out on opportunities of the present. May all your endeavours are met with huge success and appreciation. Let new beginnings signify new chapter filled with pages of success and happiness, written by the ink of hard work and intelligence. May the New Year bring us more wonderful opportunities to work together. Let us all create a better working environment as you move forward on fulfilling the common goals of the organization by tacking together everyone around you. May God give you the strength to overcome difficulties and the confidence to walk on the difficult road to success. For all my fraternity members, may the coming year bring success. May your family stay blessed with health and wealth. Continue to work hard and achieve better results.

With heartfelt thanks,

Dr. N.V. RAMANA RAO

Director, NIT Raipur

14th Convocation Ceremony of the Institute

NIT Raipur celebrated its **14th Convocation Ceremony** graced by the *Hon'ble President of India,* **Smt. Droupadi Murmu** as the *Chief Guest*. Also, in attendance as *Guests of Honour* were the *Hon'ble Governor*, *Chhattisgarh,* **Shri Ramen Deka**; the *Hon'ble Chief Minister*, *Chhattisgarh,* **Shri Vishnu Deo Sai** and **Shri Tokhan Sahu**, *Hon'ble Minister of State*, *Urban and Town Country Planning, Government of India.* The ceremony was presided over by **Dr. Suresh Haware**, *Chairman*, *BoG* and attended by **Dr. N.V. Ramana Rao**, *Director*, *NIT Raipur*, Senate Members, Registrar, Deans, Heads of Departments and faculty members. In this year, NIT Raipur awarded degrees to **1044 B. Tech** and **B. Arch** students, **225 MCA** and **M. Tech** students, and **170 Ph.D. candidates**. Medals were presented to the top-performing students, with **13 Gold** and **12 Silver Medals** awarded across B. Tech and B. Arch programs, and **11 Gold** and **11 Silver Medals** for MCA and M. Tech programs. **Yash Bansal**, *B.Tech*, *CSE* was named the **Overall Topper** of the Institute.

In her address, **Smt. Murmu** acknowledged the contributions of faculty in shaping the future leaders of the nation. *Today, as you step into a new chapter of life, remember the role of science and technology in addressing the world's challenges,* she stated. **Smt. Murmu** highlighted India's achievements in artificial intelligence and its relevance to modern scientific research, referencing the recent Nobel Prizes in physics and chemistry, which honoured breakthroughs in AI.

The Hon'ble Chief Minister expressed his gratitude to **Smt. Murmu** for her presence and acknowledged her role in inspiring the youth of **Chhattisgarh**. He reminded the graduates that engineering is not only about technology but about applying science to solve societal challenges. He noted that the state being largely agrarian will benefit greatly from the technical contributions of educated engineers in fields like agriculture and rural development. **Shri Deka** congratulated the students and encouraged them to use their acquired knowledge to address global issues, stating, *With the skills you have honed here, face the world's pressing issues like poverty,*

hunger, and unemployment. **Dr. Haware** in his speech, expressed gratitude to the **Hon'ble President of India** and talked about the life journey of the **Hon'ble President** which is a journey from village to knowledge. He highlighted her achievements and said that we should take inspiration from her life. He asked everyone to recognize their own potential and never be bound by a limit and take big challenges and become big, do not be disappointed by defeat but learn from it and move towards bigger victories. In his presidential address, **Dr. Rao** highlighted the Institute's journey since its establishment in 1956 as a **Government Engineering College** and its transformation into a **National Institute of Technology** in 2005. He celebrated the Institute's achievements, including its placement in the #1001-1200 range in the **Times Higher Education World University Rankings 2025** and its **rank of 71st** in the **NIRF Engineering** category with a score of **48.88**. **Dr. Rao** also noted the Institute's recent accomplishments: receiving 95 sponsored research projects worth Rs. 32.9 crores, signing 43 MOUs, starting a PG course in Urban Planning, and having 15 faculty members recognized in Stanford University's Top 2% Scientists list for 2024.

In the second part of the program, PhD students were awarded degrees and medals were given to the students of the PG program. Apart from this, degrees were also given to other passed out students.

NIT Raipur in World University Rankings 2025

NIT Raipur has made a notable debut in the **Times Higher Education (THE)** World University Rankings 2025, securing a position in the **1001-1200 range**. This achievement places NIT Raipur among the **Top 2092** ranked institutions worldwide. With an overall **score of 30.7–34.4**, the institute ranks **45th** out of 107 higher educational institutions in India. The Institute performed particularly well in **research quality**, reflecting its strong research influence and citation impact. This recognition highlights NIT Raipur's commitment to producing high-quality research, fostering international collaborations, and improving its teaching environment and industry connections.

20th Foundation Day of the Institute

NIT Raipur celebrated its **20th Foundation Day** on 2nd Dec. 2024. Its rich legacy dates to 1956, when it was established as the **Government Engineering College (GEC) Raipur**. The

Institute officially earned the distinguished title of **National Institute of Technology (NIT) Raipur** on 1st Dec. 2005. **Shri. B. L. Agrawal**, *MD, Godawari Power and Ispat Limited*, was the *Chief Guest* of the event. **Shri. Vijay Kumar Chablani**, *CGM, CG Telecom Circle* was the *Guest of Honor*. **Dr. K. K. Shukla**, *Director*, *MANIT Bhopal* was the *Special Guest*. The event was presided over by **Dr. N. V. Ramana Rao**, *Director, NIT Raipur*. All the HoDs, faculty members, staff, alumni, students and family members were also present during the event.

Dr. Nitin Jain, *Dean (SW)* welcomed **Shri. Chablani**, **Dr. Shukla** and **Dr. Rao** with saplings. **Dr. Samir Bajpai**, *Head, CDC* welcomed **Mr. Agrawal** with sapling and the attendees with his speech. Moving ahead, a documentary featuring the legacy of the Institute, its impressive placement and PPO records, and the various achievements of the students, faculties, and alumni were also presented. **Dr. Prabhat Diwan**, *Dean (R&C)* emphasized NIT Raipur's transformation from GEC to a leading institute excelling in UG, PG, and Ph.D. programs and highlighted advancements in teaching, innovation, and research under visionary leadership, with initiatives like the **Innovation Cell** and **Seed Grants** fostering impactful student ideas. **Dr. Rao** highlighted the institute's journey of nurturing talent and achieving excellence and praised the faculty and students for their contributions to technical advancements and solving real-world problems. Celebrating the institute's legacy, he urged everyone to embrace new ideas, work hard, and dream big. **Dr. Shukla** lauded NIT Raipur's remarkable 19-year journey as an NIT and emphasized the institute's legacy of academic and research excellence, highlighting its collaborative efforts with alumni and sponsored research projects. Proposing the launch of multidisciplinary programs like ECM. **Mr. Chablani**, *Alumnus (ECE/1988)* expressed his gratitude to NIT Raipur for its pivotal role in shaping his career. Recalling his transformative journey, he shared his experiences of technological advancements in telecommunications, from manual telephony to wireless networks. Encouraging students to embrace growth opportunities and build lifelong connections. **Mr. Agrawal**, *Alumnus (Elec/1976)* shared anecdotes from his college days, recounting his journey from

being a backbencher to becoming a successful entrepreneur. He also spoke about overcoming language barriers, learning through failures, and his ventures in establishing cement and power plants. He inspired students to approach every task with dedication, highlighting the importance of persistence and adaptability in achieving success.

This was followed by the **Awards Ceremony**. The **Best Department Award** was awarded to the **Civil Engineering (CE)**. The **Best Researcher Award** was bagged by **Dr. Dilip Singh Sisodia**, *Associate Professor*, *CSE*. **The Young Achiever Alumnus Award** was given to **Dr. Divya Agrawal**, *Alumnus (BME/2009)* and the **Distinguished Alumnus Award** was given to **Dr. Anita Gupta**, *Alumnus (ME/1987)* and **Dr. Arvind Kumar Mishra**, *Alumnus (Mining/1990)*. Further, the student achievers were recognized by providing scholarships and awards. Next on the schedule were the cultural performances by **Raaga - The Music Club** and **Nrityam - The Dance Club**. The event ended with a vote of thanks.

Institute Hosted 1st Chhattisgarh Green Summit 2024

NIT Raipur hosted **1st Chhattisgarh Green Summit 2024** in collaboration with **Chhattisgarh's Forest and Climate Change Department**, **Vibgyor N.E. Foundation**, **Prajna Pravah** and **Amity University Chhattisgarh**. The event was organized from 3rd to 5th Oct. 2024, featuring prominent environmentalists, scientists, and representatives from various institutions. This event brought together key stakeholders to discuss and promote environmental sustainability and the integration of Lok traditions in the development discourse. **LokManthan**, which began in 2016, aims to unite artists, thinkers, intellectuals, and social activists across the countries. It is a cultural *Mahakumbh* that seeks to reshape narratives and equip the nation to embrace its civilizational role.

The summit began on 3rd Oct. 2024 with an inaugural session, with dignitaries gracing the dais including **Mr. Vishnu Deo Sai**, *Chief Minister*, *Chhattisgarh*, **Mr. Kedar Kashyap**, *Minister*, *Forest and Climate Change*, *Chhattisgarh*, **Mr. V. Srinivasa Rao**, *Principal Chief Conservator of Forests and Head of Forest Force (PCCF & HoFF)*, *Chhattisgarh*, **Mr.**

Ashiho Asosii Mao, *Director*, *Botanical Survey of India*, **Dr. N.V. Ramana Rao**, *Director*, *NIT Raipur*, **Mr. J. Nandakumar**, *National Coordinator*, *Prajna Pravah*, **Mr. Gopal Arya**, *National Coordinator*, *ParyavaranSanrakshan*, and **Dr. Piyush Kant Pandey**, *Vice Chancellor*, *Amity University*, *Raipur*. **Mr. Sai** emphasised the state's proactive role in India's renewable energy future and the fight against climate change and pointed out that Chhattisgarh is expanding its solar and hydropower capacities and will be pivotal in helping India meet its ambitious target of achieving 500 gigawatts of renewable energy by 2030. In conclusion, **Mr. Sai** reaffirmed his government's commitment to ensuring that the state remains at the forefront of environmental sustainability efforts, contributing significantly to both India's renewable energy targets and broader global climate change mitigation strategies. **Mr. Kashyap** emphasized the state's rich forest heritage and expressed concern over the depletion of forest cover over time, highlighting the significant changes that have occurred in recent years. He remarked that it is imperative that we, as a society, work toward forest welfare and environmental restoration to reverse climate change. **Mr. V. Srinivasa Rao** emphasized the importance of the summit as a platform to rethink forestry and conservation strategies and highlighted the goal of developing a sustainable model that balances ecological preservation with community welfare, ensuring the long-term vitality of forests. **Mr. Rao** spoke about the importance of sustainable development and environmental prosperity, emphasizing the need for collective efforts toward achieving these goals. **Dr. N.V. Ramana Rao** emphasized the institute's dedication to environmental education and sustainability and expressed pride in supporting the Chhattisgarh Green Summit 2024, highlighting its alignment with NIT Raipur's mission to promote sustainable development. **Mr. Gopal** stressed the need for a collective effort towards environmental conservation and called for innovative strategies that can harmonize economic growth with ecological preservation, urging all stakeholders to unite for the planet's future. **Mr. Nandakumar** highlighted the importance of integrating traditional knowledge with modern practices in environmental stewardship. **Dr. Piyush** emphasized the crucial role of community involvement in conservation initiatives.

The second day of the event, held on 4th Oct. 2024, covered a broad range of topics, including the sustainable **Utilisation of Non-Timber Forest Products (NTFPs)**, **Ecotourism** and the **Impact of Climate Change on Forests and Indigenous communities**. The speakers of the session on **NTFPs** included **Prof. Sudip Mitra**, *Professor*, *School of Agro & Rural Technology*, *IIT-Guwahati*, **Shri Anand Babu**, *IFS*, *PCCF*,

State Forest Research and Training Institute (SFRTI), *Chhattisgarh*, **Shri Bibhash K. Thakur**, *IFS*, *PCCF & MD*, *MFP Federation*, *Madhya Pradesh*, **Shri Ashish Saraf**, *President*, *Manorama Industries Pvt. Ltd.*, and **Padma Shri Jageshwar Yadav**, *Activist*, *Birhor Community*, *Jashpur.* The speakers of the session on **Ecotourism** were **Ms. Neeta Bajpai**, *State Coordinator*, *NSS*, *Department of Higher Education*, *Chhattisgarh*, **Mr. Jaspreet Singh Bhatia**, *Founder*, *Ice Cubes Holiday*, and **Mr. N. Gurunathan**, *DFO*, *Keshkal.* The speakers of the session on **Climate Change** included **Dr. Priyadarshini Karve**, *National Coordinator*, *INECC Pune*, **Mr. Arun Pandey**, *IFS*, *State Climate Change Centre*, *Chhattisgarh* and **Mr. Ashish Patel**, *Climate and Craft Entrepreneur*, *Raipur.* The session on **Spatial Planning in Forest Management** featured **Mr. Prabhat K. Malik**, *Retired IFS*, *Former PCCF*, *Government of Odisha*, **Padma Shri Popatrao Pawar,** *Sarpanch*, *Hiwarebazar*, *Maharashtra* and **Mr. Alok Tiwari**, *IFS.* The day concluded with a session on the **Development Perspective of Forest-dwelling Communities** by **Swami Krishnamitranand**, *Ramakrishna Mission*, *Narayanpur*, **Shri Subrato Sen**, *Organiser*, *Donyi Polo Cultural Charitable Trust*, *Arunachal Pradesh* and **Padma Shri Jageshwar Yadav**. Another key panel on **Technological Advancements in the Sustainable Utilization of Medicinal Plants** was chaired by **Dr. Girish Chandel**, *Vice Chancellor*, *IGKV Raipur*. Speakers of the session included **Shri Jatindra Sharma**, *Retired IFS*, *Chairman*, *State Expert Appraisal Committee*, *Assam*, **Shri J.A.C.S Rao**, *IFS*, *CEO*, *State Medicinal Plant Board Raipur*, **Padma Shri Hemchand Manjhi**, *Baidyaraj*, *Narayanpur* and **Dr. N. P. Yadav**, *Principal Scientist*, *CSIR-Central Institute of Medicinal and Aromatic Plants*, *Lucknow*. The cultural events of the day showcased Chhattisgarh's rich heritage through folk music, dance, and storytelling.

The closing ceremony was held on 5th Oct. 2024 where **Mr. Ramen Deka**, *Governor*, *Chhattisgarh* was the Chief Guest. He stated that this camp would serve as a milestone in raising environmental awareness and preserving ecosystems and emphasized the need for collective action to protect nature. **Dr. Piyush Kant**, **Mr. V. Shrinivasa Rao**, **Mr. Rakesh Chaturvedi**, *Former PCCF & HOFF,* **Shri C.P. Marak**, *Executive Chairman*, *Meghalaya Board of School Education*, **Mr. Atul Nagre**, and **Mr. Kedar Kashyap**. The event concluded with a call for immediate action to address the region's pressing ecological challenges where **Mr. Kashyap** expressed deep concern about ecosystem degradation and water pollution and urged attendees to take concrete steps to protect and restore the environment, emphasizing the need for reforestation efforts and incorporating cultural practices into

conservation initiatives. **Mr. Deka** emphasized the crucial role of forests in maintaining a healthy environment and warned against the consequences of deforestation and called for greater efforts to protect biodiversity and appealed to all attendees to take action to conserve nature. The speakers of discussion on **Wetland Restoration and Greening Urban Landscapes** included **Dr. Samir Bajpai**, *Professor*, *CE*, *NIT Raipur,* S**hri Shantanu Datta**, *Member Secretary*, *Pollution Control Board*, *Assam* and **Shri Vijay Dashmana**, *Founder*, *The Rewinders.* Speakers of the session on **Benefit Sharing Mechanism (Biodiversity and Carbon Credit)** were **Dr. K.T. Parthiban**, **Mr. Abhishek Mahawar**, *Founder*, *Bodhi Hub*, *New Delhi*, **Mr. R.K. Singh**, *Retd IFS & PCCF & Hoff*, *Chhattisgarh.*

During the event, various environmental issues were discussed, including biodiversity conservation, measures to prevent deforestation, and the importance of environmental education. Experts highlighted the need for enhanced coordination between the government and local communities to safeguard Chhattisgarh's green resources. The organizers plan to make this camp an annual event to ensure the continuity of environmental protection efforts. The Governor and distinguished guests praised the efforts of the organizing committee and urged everyone to remain aware of environmental conservation.

Inauguration of Indoor Sports Complex

NIT Raipur's new **Indoor Sports Complex** was inaugurated on 14th Nov. 2024 by **Dr. Suresh Haware**, *Chairman*, *BoG*, *NIT Raipur* in the presence of **Dr. N.V. Ramana Rao**, *Director*, *NIT Raipur* and **Dr. G. D. Ramtekkar**, *Dean (P&D)*, *NIT Raipur*. **Dr. Haware** addressed and motivated the students of the institute, emphasizing the importance of sports & fitness, and encouraging them to actively participate in sports activities.

This new Indoor Sports Complex in the **NIT Raipur** campus is a G+1 storey RCC-framed structure with a steel truss roof and spans over a total plinth area of 1,451.30 square metres. It has modern amenities and dedicated spaces for indoor sports, including badminton halls and table tennis halls, furnished with wooden flooring. It has been constructed by the **Central**

Public Works Department (CPWD) Raipur in a period of two years. The project, with a total sanctioned cost of ₹4.86 crores, was funded by the *Government of India (GoI)* under the EWS Reservation Enhancement Scheme. A Children's play area and park named *Oxygen Park*, spanning around 10,000 square metres, was also inaugurated in the institute campus on Children's Day.

The inauguration ceremony was attended by all Deans, **Dr. R. K. Tripathi**, *Professor*, *CE*, **Dr. L. K. Yadu** and **Dr. A.V. Ahirwar**, *Associate Deans (P&D)*, **Mr. S. P. Shrivastava**, *Executive Engineer*, **Mr. Pawan Kataria**, *Assistant Registrar (P&D)*, faculty members, and staff of NIT Raipur. Senior officials from **CPWD Raipur**, including **Shri. Ritesh Kumar Agrawal**, *Executive Engineer (Civil)* and **Mr. Pushpraj Kashyap**, *Architect*, **Mr. Paras Limje**, *Assistant Engineer (Civil)* was also in attendance. The inauguration of this Indoor Sports Complex and Oxygen Park marks a significant enhancement to NIT Raipur's sports infrastructure, supporting the institute's journey toward excellence in academics, physical fitness, and community building.

Annual Alumni Day '24

NIT Raipur organized the **Annual Alumni Day 2024** meet at the Institute's Golden Tower on 22nd Dec. 2024. **Dr. N. V. Ramana Rao**, *Director*, *NIT Raipur* graced the event as the *Chief Guest*. It witnessed the reunion of the batches of **1964** (*Diamond Jubilee*), **1974** (*Golden Jubilee Reunion*), **1989** (*Coral Reunion*) and **1999** (*Silver Jubilee Reunion*). The Alumni Meet session was organized under the guidance of the **Alumni Association**, *GEC*, *NIT Raipur.*

Mr. Mahesh Chandak*, Vice President*, *Alumni Association* delivered a welcome speech, shedding light on the Alumni Association's role in the institution's development. **Mr. Anant Singh Parihar**, *Secretary*, *Alumni Association* shared about the association's history, aid to financially challenged students through SEF, academic support, and the Rs. 1.46 Crore Golden Tower project. **Dr. B. K. Dutta**, *Alumnus (1964)* shared his insights on the establishment of post-graduation, M. Tech and PhD courses in Nuclear Science. **Mr. G. V. Chaoji**,

Alumnus (1974) addressed the gathering by expressing his gratitude to the alumni of various batches. **Mr. Yogesh Sharma**, *Alumnus (1989)* shared nostalgic sentiments which imparted deep learnings in his life. **Mr. Sandeep Thakur**, *Alumnus (1999)* appreciated the coordination and unity among the Alumni Association for making the event a grand success. **Dr. Rao's** inspiring address praised the alumni's achievements and contributions, highlighting their role in NIT Raipur's legacy and extending New Year wishes. The event concluded with lunch, after which the alumni revisited their departments, cherishing memories and reconnecting with their roots.

Valedictory session of the 4th Janjatiya Gaurav Diwas

NIT Raipur organised the valedictory session of the **4th Janjatiya Gaurav week** on 23rd Nov. 2024. **Dr. N.V. Ramana Rao**, *Director*, *NIT Raipur* served as the *Chief Guest* virtually graced the event. **Dr. Nitin Jain**, *Dean (SW)* accompanied by **Dr. Mukesh Singh**, *Professor, Department of Industrial Production Engineering, Guru Ghasidas Vishwavidyalay, Bilaspur,* who served as *Guest of Honor.* The program was conducted under the guidance of **Dr. Meena Murmu**, *Assistant Professor, CE.* **Dr. M. K. Prasad**, *Associate Dean (SW)*, **Dr. Chandrashekar Jatoth**, *Assistant Professor, IT*, **Dr. Deboraj Muchahary**, *Assistant Professor, ECE* and other faculty members, staff and students participated enthusiastically in this function.

Dr. Rao honored India's tribal heritage and hailed Bhagwan Birsa Munda as a symbol of resilience in the freedom struggle for his leadership against British rule. **Dr. Nitin Jain** highlighted Birsa Munda's rise from humble beginnings to leading a rebellion against the British. **Dr. Meena Murmu** praised his inspiring legacy and significant contributions to tribal development, making him the face of Janjatiya Gaurav Diwas.

Keynote speaker **Dr. Mukesh Singh** emphasized the importance of Janjatiya Gaurav Diwas and stressed that a developed India requires uplifting tribals, who embody the nation's essence, and advocated for preserving Indian values over Eurocentric models. **Vickey Prasad** won the Poster Competition. In the Speech Competition, **Ayush Mishra** took 1st place, followed by **Sarthak Pandey** and **Abhishek**. **Aarush Raj Gupta** won the Quiz Competition, with **Aditya Raj Pradhan** and **Shantanu Trivedi** in 2nd and 3rd place, respectively. The event featured a Rangoli exhibition and honored tribal students excelling in various fields.

This was followed by a presentation on NITRRFIE, the incubation centre of the institute, by **Dr. Anuj Kumar Shukla**, *Professor In-Charge*, *NITRRFIE,* he emphasized empowering India's tribal communities and highlighted startups contributions to the GDP, affirming India's dominance in the 21st century. He mentioned government schemes supporting tribal entrepreneurs and startups. The event ended with a vote of thanks by **Dr. Baidyanath Bag**, *Assistant Professor, EE.*

NITRRFIE Hosted Pravartan- A Flagship Startup Outreach Event

NIT Raipur, through its Incubation Centre, **NIT Raipur Foundation for Innovation and Entrepreneurship (NITRRFIE)**, in collaboration with the **Small Industries Development Bank of India (SIDBI)**, successfully hosted **Pravartan 2024**, a flagship startup outreach event on 27th Dec. 2024. The event aimed to foster innovation, entrepreneurship, and early-stage investment in India's startup ecosystem, drawing strong participation from entrepreneurs, investors, and students. **Dr. Samir Bajpai**, *Head*, *CDC* articulated NIT Raipur's vision for nurturing future entrepreneurs, while **Dr. Anuj Kumar Shukla**, *Professor In-charge*, *Incubation Cell* presented a detailed overview of NITRRFIE's role in startup incubation and mentorship. Representatives from SIDBI, including **Mr. Vijay Kumar Singh**, *DGM* and **Mr. Anupam Srivastava**, *Manager* highlighted the organization's significant contributions to empowering MSMEs and startups. **Ms. Suhani Kumar**, *Manager*, *Startup India* outlined the government's robust support systems available to budding ventures.

A key highlight was the pitching session, where selected startups presented their innovative ideas to a panel of investors. The panel included prominent investors, including

Mr. **Rajiv Raghunandan**, *Managing Partner*, *Arali Ventures*, **Ms. Richa Bajpai**, *Founder and CEO*, *Campus Fund* and **Mr. Rohan Pichai**, *Analyst*, *Unicorn India Ventures*. Industry leaders participated in panel discussions, evaluated pitches, and provided feedback. Six startups received strong interest from investors, who expressed a desire for further discussions on investment. The event concluded with a heartfelt vote of thanks delivered by **Mr. Pawan Kataria**, *Assistant Registrar*, *NIT Raipur*, who expressed gratitude to all participants, sponsors, speakers, volunteers, and organizers for their contributions to the event's success. The presence of **Mr. Abhijeet Sharma**, *CEO, NITRRFIE*, **Mr. Sunil Dewangan**, *Incubation Manager*, and **Mr. Ashok Sahu**, *Accountant* further underscored the importance of Pravartan 2024 in advancing entrepreneurial initiatives. **Dr. Anuj K. Shukla** noted that Pravartan 2024 reinforced NIT Raipur and NITRRFIE's commitment to India's startup ecosystem. Sponsored by SIDBI, the event provided insights into funding and business strategies, fostering key dialogues between entrepreneurs, investors, and students.

All-India Inter NIT Faculty and Staff Sports Meet at NIT Kurukshetra

NIT Raipur participated in the **All-India Inter-NIT Faculty and Staff Sports Meet** organized at **NIT Kurukshetra** and secured **3rd Position** overall among 18 participating institutes from 20th to 22nd Dec. 2024.

Mr. Sayon Pramanik, *Assistant Professor*, *DAP* received a Gold in **Table Tennis Singles Category**. **Dr. Shirish V. Deo**, *Professor*, *CE* received a Bronze in **Table Tennis Singles Category**. **Mr. Sayon Pramanik** and **Dr. Shirish V. Deo** also received a Gold in **Table Tennis Doubles Category**. **Mr. Sayon Pramanik** and **Dr. Alfia Bano**, *Assistant Professor*, *CE* bagged a Bronze in **Table Tennis Mixed doubles**, with the team winning a Bronze in the team event. **Dr. Meena Murmu**, *Assistant Professor*, *CE* received a Bronze in **Women's Badminton Singles Category**. **Dr. Meena Murmu** and **Mr. Dharmendra Pandey**, *Technical Assistant*, *CSE* also received Silver in **Mixed Badminton Doubles Category**. This achievement, guided by *Team manager* **Dr. Suraj Kumar Mukti**, *Associate Professor*, *ME* and *Coach* **Mr. Kamal Singh Maan**, *Sports Officer*, underscores **NIT**

Raipur's emphasis on development in academics and extracurricular activities.

Swachhata Hi Seva 2024

NIT Raipur organized the **Swachhata Hi Seva (SHS 2024) campaign** from 17th Sep. to 2nd Oct. 2024. On 17th Sep., a tree plantation program was organized under the campaign **Ek Ped Maa Ke Naam**, in which **Dr. N.V. Ramana Rao**, *Director, NIT Raipur*, **Dr. P.Y. Dhekne**, *Registrar*, **Dr. G.D. Ramtekkar**, *Dean (P&D)*, **Dr. D. Sanyal**, *Dean (FW)*, **Dr. T.P. Sahu**, *Nodal Officer*, *Swachhata Pakhwada*, **Dr. M.K. Prasad**, *Associate Dean (SW)*, **Dr. Himanshu Poptani**, *Nodal Officer, Plantation Activity*, **Dr. D.C. Jhariya**, *Faculty (I/C), Go Green*, **Dr. Govardhan Bhatt**, *Faculty (I/C), NSS and Yuva Tourism Club* and other faculty members, staff and students were present.

In the SHS campaign, a **Cleanliness drive** and a **Dance performance** were also organized, in which the **NSS club** students cleaned the institute and its surroundings, while the students of **Nrityam Club** presented a dance performance. **Dr. D. Sanyal**, **Dr. T. P. Sahu**, **Dr. Moksha Singh**, *Assistant Professor*, *DHSS* and **Dr. M. K. Prasad** faculty members and students were present.

Sahyog- The Student Wellbeing Club, **NIT Raipur** organized a Five-day workshop on **Health**, **Wellbeing**, **and Welfare of SafaiMitras** as part of the SHS 2024 campaign, under the Ministry of Education, GoI. Held from 24th to 28th Sep. 2024, this workshop supported the **Safaimitra Suraksha Shivir** initiative, focusing on a health and welfare camp for SafaiMitras and raising awareness about government welfare schemes. **Dr. Rao** served as the *Chief Guest* and the workshop was graced by the presence of **Dr. P. Y. Dhekne**, **Dr. Nitin Jain**, *Dean (SW)*, **Dr. T. P. Sahu** and **Dr. S. Sanyal**, *Professor*, *ME*. The organising committee was led by **Dr. Ashish Kumar Dash**, *Professor In-Charge*, *Sahyog*, **Dr. Madhukrishna Priyadarsini**, *Assistant Professor*, *CSE* along with **Dr. Soumya Agrawal**, *Medical Officer*, *NIT Raipur*.

Aakriti- The Fine Arts Club, **NIT Raipur** hosted a wastepaper competition, on 28th Sep. 2024. The program was organised under the guidance of **Dr. S. Sanyal** and **Dr.**

Himanshu Poptani. The wastepaper competition challenged participants to create innovative artworks using materials like magazines and newspapers. The winners were **Reem Pari** at the **1st position** followed by **Aanadita** and **Pooja** on the **2nd** and **Dharvesh** and **Hana on the 3rd**. The ongoing events, focused on promoting cleanliness and environmental preservation, saw enthusiastic participation from students and volunteers.

Shaurya - The Sports Committee, **NIT Raipur** organized a two-day sports league on 27th and 28th Sep. under the **Swachhata Hi Seva** campaign, guided by **Dr. H. K. Narang**, *Faculty (I/C)*, *Shaurya* and **Mr. Kamal Singh Maan**, *Sports Officer.* Events included volleyball, football leagues, and a cyclothon. In volleyball, team **NIT Warriors** secured **1st** place, followed by **NIT Royal Challengers** and **NIT Lions**. In football, team **Anonymous** took **1st**, and team **Chutki 2nd**. Faculty and students, including **Dr. Manoj Pradhan**, *Professor, DME* participated enthusiastically in the cyclothon. These activities fostered sportsmanship and raised awareness about cleanliness.

On 30th Sep., **Unnat Bharat Abhiyan (UBA)**, **NIT Raipur** organized a **Cleanliness drive** at Shivrinarayan, Janjgir-Champa, under the SHS 2024 campaign, led by **Dr. Rao** and guided by **Dr. Sudhakar Pandey**, *Regional Coordinator, UBA*. Faculty members, including **Dr. H. Bikrol**, *Associate Professor, MCA*, **Dr. Suvendu Rup**, *Associate Professor*, *IT*, **Dr. B. Acharya**, *Associate Professor, ECE*, **Dr. T.P. Sahu** and **Dr. Deepika Agarwal**, *Assistant Professor*, *IT* joined students to clean the Mahanadi River ghats near Shabri Dham, collecting plastic waste and raising awareness about maintaining clean water bodies. Locals and UBA members also took a cleanliness oath, and students visited temples to emphasize the cultural significance of cleanliness. On the same day, **Abhinay – The Dramatics Club**, **NIT Raipur** performed a street play, *Swachhmev Jayate*, under the guidance of **Dr. Govardhan Bhatt**, **Dr. Deepak Singh**, *Assistant Professor*, *CSE* and **Dr. Nisha Netam**, *Assistant Professor*, *ME*. Additionally, **National Cadet Corps (NCC)**, **NIT Raipur** conducted a **Cleanliness drive** at DDU Nagar-Gayatri Hospital Road, cleaning a black spot and promoting sanitation awareness which was led by **Dr. Jitendra Kumar Rout**, *Faculty In-Charge*, *NCC*, and **Mr. Kamal Singh Maan** emphasized the importance of maintaining public spaces.

National service Scheme (NSS), **NIT Raipur** organised a program on Gandhi Jayanti on 2nd Oct. 2024. They also celebrated **NSS Day** and **Swachh Bharat Diwas**, aligning with the SHS campaign. The event witnessed the presence of the Chief Guest, **Shri Mayank Dubey**, *Chattisgarh Nodal Officer*, *Ministry of Tourism.* **Dr. S. Pandey**, **Dr. M.K. Prasad**, **Dr. T. P. Sahu**, **Dr. G. Bhatt** and **Dr. Meena Murmu**, *Assistant Professor, CE* were also present during the event.

Celebration of National Mathematics Day

Department of Mathematics (DoM), **NIT Raipur**, celebrated **National Mathematics Day 2024** on 7th and 8th Dec. 2024, as a tribute to the legendary mathematician **Srinivasa Ramanujan**. This event was organized in collaboration with the **Chhattisgarh Council of Science & Technology (CCOST)** and graced by the presence of **Dr. Shrish Verma**, *Dean (Academics)*, *NIT Raipur*, **Dr. P.Y. Dhekne**, *Registrar*, *NIT Raipur*, **Dr. Debasisha Mishra**, *HoD*, *DoM*, *NIT Raipur*, who attended as *Guests of Honour*.

The celebration commenced with an inaugural ceremony led by **Dr. A.B. Soni**, *Director (I/C)*, *NIT Raipur*. In her inspiring address, she highlighted the pivotal role mathematics plays in everyday life and its profound applications across various fields, ranging from technology to the sciences. This two-day event was meticulously organized under the guidance of **Dr. D. Mishra**, along with **Dr. Rajesh Doriya**, *Assistant Professor*, *IT*, **Dr. Neeraj Manhas**, *Assistant Professor*, *DoM* and **Dr. Ranjan Kumar Das**, *Assistant Professor*, *DoM*, who worked diligently alongside the faculty of the Department of Mathematics to ensure the event's success. The event featured engaging competitions and interactive sessions aimed at inspiring and nurturing mathematical talents. **Fun with Puzzles**, for grades 6 to 9, saw **Vedansh Agrawal** securing the **first position**, followed by **Shiksha Lawankar** and **Aadya Agrawal**. In the senior category (grades 10 to 12), **Keshab Agrawal** emerged as the winner, with **Sikandar Kanungo** as the runner-up. The **Project Presentation** competition showcased innovative ideas, with **Lukita Deshmukh** and **Jaahnavi** clinching the top spot, followed by **Omkeswar Sinha** and **Aayush Turkar**. The **Poster Presentation** competition encouraged participants to blend creativity with mathematical concepts, with **Kritesh Dhanuka** taking the **first prize**. Additionally, the event featured several other exciting activities, including quizzes,

painting competitions, and doodling sessions, which saw enthusiastic participation and added vibrancy to the celebrations.

A key highlight of the event was the inspiring keynote sessions delivered by esteemed speakers. **Dr. Ram Murty**, *Professor, Queen's University, Canada*, delivered a lecture titled **The Integral That Changed the World**, highlighting the profound impact of mathematics on global challenges. **Dr. Jitendra Kumar Rout**, *Assistant Professor, CSE, NIT Raipur*, presented a session on **Introduction to Machine Learning**, offering insights into artificial intelligence and its applications. **Dr. Rajat Kousik** engaged the audience with his talk on **Innovative Teaching Methodologies**, focusing on the transformative role of AI in modern education. **Dr. Kamal Raj Pardasani**, *Professor, MANIT Bhopal*, inspired students with his session on **Careers in Mathematics** emphasizing opportunities for higher education, scholarships, and fellowships. Concluding the sessions, **Mr. Priya Ranjan Mallick,** *Assistant Professor, OUTR Odisha*, delivered an engaging talk on the life and achievements of **Srinivasa Ramanujan**, emphasizing his extraordinary contributions to mathematics and the importance of perseverance.

The event concluded with a valedictory session presided over by **Dr. Dhekne**, **Dr. D. Mishra**, **Dr. S. N. Raw**, *Associate Professor, DoM, NIT Raipur*. **National Mathematics Day 2024** inspired participants to explore the fascinating world of mathematics, its applications, and its transformative role in shaping the modern world.

SIH Internal Hackathon 2024

Department of Computer Science & Engineering (CSE), NIT Raipur conducted the **Internal Hackathon (Software Edition)** for **Smart India Hackathon (SIH) 2024**. The inaugural event was held on 17th Sep. 2024 and was graced by prominent dignitaries, including the *Chief Guests* **Dr. N. V. Ramana Rao**, *Director, NIT Raipur*, and **Dr. Rajeev Tripathi**, *Ex-Director, MNNIT Allahabad*, the *Guest of Honour*, **Dr. Shrish Verma**, *Dean (Academics)* and *Special Guest*, **Dr. Samir Bajpai**, *Head, CDC*. Faculty members and students were also present at the event.

The inaugural event commenced with the introductory speech by **Dr. Pradeep Singh**, *HoD, CSE* where he highlighted the role of innovation and hackathons in addressing national challenges and shared that over 300 participants, across 50+ teams, had registered for the internal hackathon, expressing hope that the event would contribute to improving the institute's NIRF ranking. **Dr. Rao** emphasized the global significance of SIH and the importance of teamwork in achieving success. **Dr. Verma** spoke about the difference between invention and innovation, encouraging students to continuously learn and think creatively to bring new solutions to real-world problems. **Dr. Bajpai** emphasized the importance of unlearning and relearning in a rapidly evolving technological landscape and highlighted that SIH prepares students for industry challenges and noted the critical role of innovation in future careers.

Dr. Nitesh Bhardwaj, *Assistant Professor, CSE* provided key guidelines for the hackathon presentations, advising participants to maintain clarity and precision. He concluded with a vote of thanks, recognizing the efforts of the Director, Dean (Academics), faculty members, students, and the ACE Technical Club.

The event aimed to select the most innovative ideas from students for submission to SIH 2024, one of the largest national hackathons, encouraging students to solve real-world problems. The two-day event saw 52 teams competing, with the top 15 teams chosen to represent the institute by submitting their innovative projects for the selection round of the SIH Grand Finale, where they will compete for a spot in the prestigious national event. The best ideas selected will advance to the SIH Grand Finale, where winners will receive cash prizes and incubation support.

Institute Observed Vigilance Awareness Week

NIT Raipur observed the **Vigilance Awareness Week** from 28th Oct. to 2nd Nov. 2024 based on the theme **Culture of Integrity for Nation's Prosperity**. The Vigilance Awareness Week celebration at the institute was organized under the guidance of **Dr. Swasti Sthapak,** *Chief Vigilance Officer (CVO), NIT Raipur*. The Chief Guest of the inaugural event was **Dr. (Mrs.) A.B. Soni**, *Director (I/C), NIT Raipur*. **Dr.**

P.Y. Dhekne, *Registrar*, *NIT Raipur*, **Dr. D. Sanyal**, *Dean (FW)*, and **Dr. G.P.S.C. Mishra**, *Dean (R&C)*, along with department heads, faculty members, and staff were present during the event.

The program commenced with Vande Mataram. **Dr. Sthapak** delivered an address highlighting the significance of Vigilance Awareness Week and briefed the attendees about the activities planned throughout the week. He emphasized the importance of fostering a culture of integrity, stating that the week coincides with the birth anniversary of Sardar Vallabhbhai Patel. **Dr. Soni** administered the Integrity Pledge to all attendees, encouraging them to oppose corruption, promote transparency, and uphold ethical business practices. The event concluded with the singing of Jana Gana Mana. The week-long celebration included activities such as essay writing competitions, poster making, and a street play.

On 29th Oct., an essay writing competition was organized under the coordination of **Dr. Sachin Kumar Sahu**, *Assistant Professor*, *DAP*. The competition was divided into two categories: Faculty and Staff, and Students. In the Faculty and Staff category, the winners were **Dr. Ayush Khare**, *Professor*, *DoP* who secured **1st Place**, **Mr. Vivek Agnihotri**, *Assistant Professor*, *DAP* who took **2nd Place**, and **Mr. Abhishek Indwar**, *Assistant Registrar* who claimed **3rd Place**. In the Student category, **Ayush Mishra** won **1st Place**, followed by **Shrishti Wadhwa** in **2nd Place**, and **Gaurav Kumar** in **3rd Place**. On 30th Oct., a poster-making competition was held for students, coordinated by **Dr. Himanshu Poptani**, *Assistant Professor*, *DAP*. In Poster Making Competition, the winners were **Kajal Kabdal** who secured **1st Place**, followed by **Shubham Mandal**, and **Niyanta Tewan** who bagged **2nd** and **3rd Place** respectively. A street play themed **Pratiksha** was organized on 1st Nov. under the supervision of **Dr. Govardhan Bhatt**, *Faculty(I/C)*, *Abhinay*. The play depicted the pervasive nature of corruption and emphasized collective efforts in combating it.

The valedictory ceremony was held on 2nd Nov. with **Dr. D. Sanyal** as the Chief Guest. The ceremony was conducted by **Dr. Shailoneil Sahu**, *Assistant Professor*, *DAP*. During the event, the winners of the competitions were felicitated, and **Dr. Sthapak** delivered the vote of thanks. He congratulated the winners and the organizing team while urging everyone to remain vigilant and committed to combating corruption.

Constitution Day Celebrations and Pledge Ceremony on Communal Harmony

NIT Raipur celebrated Constitution Day on 26th Nov. 2024 marking 75 years since the adoption of the Indian Constitution. The event was inaugurated with a video presentation highlighting the importance of the Constitution and its foundational principles of **Justice**, **Equality**, **Liberty** and **Fraternity**. **Dr. N. V. Ramana Rao**, *Director*, *NIT Raipur*, **Dr. P. Y. Dhekne**, *Registrar*, alongside all Deans, HoDs, staff and students attended the event, showcasing collective support for communal harmony and constitutional values.

Dr. Rao emphasized how democracy and communal harmony are intertwined for India's socio-economic growth and explained the significance of **Equality before the Law** and **Freedom of Religion**, underlining the importance of Directive Principles that aim to ensure socio-economic justice for all citizens. The event included the recital of the pledge of **Communal Harmony** and **Constitution Day**, with all participants vowing to uphold the principles of the Constitution. The celebration also observed Communal Harmony Campaign, aligning with the campaign tagline, *Hamara Samvidhaan*, *Hamara Swabhimaan*. The program concluded with reflections on the crucial role of the Constitution in a diverse country like India, enabling democracy to thrive through unity in diversity.

Seminar on World Mental Health Day

NIT Raipur celebrated **World Mental Health** Day on 10th Oct. 2024, with **Dr. A.B. Soni**, *Director (I/C)* as the Chief Guest. **Dr. Samir Bajpai**, *Head, CDC* and **Dr. Heena Chawda**, *Faculty, DHSS* also graced the event. The program focused on raising mental health awareness, guiding students on combating depression, and promoting overall well-being. **Dr. Heena Chawda** urged students to avoid negative thoughts and overthinking, stressing the importance of sharing feelings. She identified financial and relationship issues as key causes

of sadness and recommended cognitive behavioral therapy for a positive mindset. **Dr. A.B. Soni** thanked **Dr. Heena Chawda** for her session, using the Ramayana to highlight life's challenges and the importance of sharing thoughts and having moral values. **Dr. Samir Bajpai** emphasized the role of happiness, prosperity, and soft skills in success, stressing the need for good communication and leadership for better placements. **Dr. Chawda** discussed overthinking and introduced the letting go meditation to release negative thoughts, followed by a special meditation session on gratitude and forgiveness. **Dr. Bajpai** reiterated the importance of practicing soft skills for success. The program ended with the National Anthem and a vote of thanks by **Dr. Chawda**.

Institute Organised the National Unity Day

NIT Raipur organized a **Pledge Ceremony** to commemorate the birth anniversary of Sardar Vallabhbhai Patel on 31st Oct. 2024. **Dr. N. V. Ramana Rao**, *Director*, *NIT Raipur*, and **Dr.**

Nitin Jain, *Dean (SW)*, extended Diwali wishes and hosted the event.

The celebrations began with the **Unity Pledge Ceremony** led by **Dr. Rao** emphasizing the importance of national unity and integrity. This was followed by the **Unity Run**, which saw participation from students and faculty as they ran around the central garden. The Unity Pledge and Unity Run reflect NIT Raipur's commitment to fostering national harmony and upholding the legacy of Sardar Patel.

Industry Institute Collaborations by IICC, NIT Raipur

Expert Talk on Characterization of Materials using Electron and Mass Spectroscopic Techniques

Department of Physics (DoP), **NIT Raipur** organized an invited expert lecture by **Dr. Manas Kumar Dalai**, *Principal Scientist*, *Central Characterization Department*, *CSIR-Institute of Minerals and Materials Technology*, *Bhubaneswar* on the **Characterization of Materials using Electron and Mass Spectroscopic Techniques** on 13th Sep. 2024. The theme of the lecture was applications of some modern techniques for characterization of materials in different conditions. The main topics that were covered during the online lecture include **Electronic Structure**, **Transition Metal oxides**, **Topological Insulators**, **Surface and interface study of thin films and multilayers**, **Photoemission Spectroscopy (UPS & XPS)**, **X-ray Absorption Spectroscopy (XAS)**, **Secondary Ion Mass Spectroscopy (SIMS)**, **Mass Spectroscopy**, **Chemical Imaging and Depth Profiling**, etc.

Expert talk on Steels and Future Sustainability

Department of Metallurgical and Materials Engineering (MME), **NIT Raipur** organised an expert lecture titled **Steels and Future Sustainability** by **Dr. Ravi Ranjan**, *Research Scientist*, *R & D division*, *TATA Steel*, *Jamshedpur* on 20th Sep. 2024. The purpose of this Industry-Expert Lecture was to prepare undergraduate students with scope and opportunities in the field of steel industry.

Dr. Ranjan shared insights with the attendees to help them better grasp of development of **Advanced High Strength Steels (AHSS)** for automotive and other relevant applications and their challenges. In addition, he has also discussed career opportunities in *R&D division*, *TATA Steel* for fresh graduate students.

Collaborative Workshop: IICC, NIT Raipur and ICICI Bank Ltd.

Industry Institute Collaboration Cell, NIT Raipur, with sponsorship from ICICI Bank Ltd., conducted a one-day workshop on 21st Sep. 2024 to identify the objectives and activities of the Cell. Guests from various industries participated in formulating the activities and objectives with their institute partners. Dr. S. Sanyal, *Chairperson, IICC*, presented the institute's profile, highlighting its strengths in various disciplines and its capability to support industry challenges. Dr. Amit Raj Singh, *Associate Professor*, *ME* along with Dr. Chetna Sharma Rajput, *Assistant Professor*, *DHSS* facilitated participants in formulating objectives and activities. Industry representatives shared their insights during the workshop. Mr. Raj Prajapati, *Principal Architect*, *Cubicles*, identified gaps in young architects' skills in air conditioning, earthing systems, and electrification. Mr. Rahul Dixit, *DGM*, *Technotask Business Solution*, emphasized the importance of undergraduates learning technologies such as AI and ChatGPT. Mr. Nitin Raut, *DGM*, *Jaiswal Neco Industry*, discussed the challenges of achieving net zero carbon emissions by 2030. Mr. Yogendra Kumar Patley, *DGM*, *Coke Oven and Coal Chemical*, *BSP*, stressed the need for safety training to prevent industrial hazards.

Mrs. Shanu Agrawal, *Data Scientist, Cognizant India Ltd.*, highlighted the need for expertise in cloud computing, generic AI, front-end tools, and Google Cloud Services, noting the impact of technological changes across disciplines. Mr. Bimbsar Nagarjun, *Superintendent Engineer*, *CSPDCL*, suggested short-term programs to generate skilled manpower, including Engineering Development Programme (EDP) modules for middle management. Mr. Himanshu Verma, *Manager*, *Mechanical Maintenance*, *BSP*, spoke about the transformation of steel industries, emphasizing the need for skilled manpower for green steel, SAP, ERP implementation, and floating solar panel maintenance. Mr. Avdesh Kumar Jain, *Director*, *Special Blast Ltd.*, stressed the importance of field visits in mining engineering and executive MTech programs for existing engineers in updated mining technologies.

Dr. Samir Bajpai, *Head*, *CDC*, concluded by emphasizing curriculum redesign to address industry challenges and encouraging industries to share their problems for student-led solutions through hackathons. The event concluded with a vote of thanks by Dr. Harendra Bikrol, *Associate Professor*, *MCA* expressing gratitude to Dr. Rao, industry executives, departmental coordinators, press, media, and the *IICC team*, with special thanks to ICICI Bank for sponsorship. The event ended with the national anthem.

Industrial visit to the Atal Bihari Vajpayee Thermal Power Station

Department of Electrical Engineering (EE), NIT Raipur, organized an Industrial Visit to Atal Bihari Vajpayee Thermal Power Station on 24th and 25th Sep. 2024. This visit to Chhattisgarh's thermal power plant gave students practical insights into power generation, enhancing their understanding of energy management and infrastructure development while preparing them for engineering careers.

Expert lecture on Industry 4.0 (IICC)

Department of Mechanical Engineering (ME), NIT Raipur, organized an expert lecture on Industry 4.0 under the Industry Institute Collaboration Cell (IICC) on 26th Sep. 2024. The event aimed to provide students with valuable insights into the latest industrial trends and technologies. Mr. Jitendra Pratap Singh Chauhan, *General Manager*, *Bhilai Steel Plant*, delivered the lecture, sharing his expertise on Industry 4.0, robotics, and Artificial Intelligence/Machine Learning (AI/ML). These technologies have the potential to revolutionize industries, transforming the way we work by making tasks easier, faster, and more precise.

Guest Lecture titled A Futuristic Approach for the Society

Industry Institute Collaboration Cell (IICC), NIT Raipur organised a guest lecture titled A Futuristic Approach for

the Society by **Dr. Mukesh Kumar Jewariya**, *Principal Scientist*, *National Physical Laboratory*, *New Delhi* on 28th Sep. 2024 where **Mr. Jewariya** explained how and why Terahertz technologies are gaining attention in different sectors these days.

Industrial Visit to Bhilai Steel Plant

Department of Mathematics (DoM), **NIT Raipur's** M.Sc. students, Ph.D. scholars, and faculty members had an industrial visit to the **Bhilai Steel Plant** on 9th and 16th Nov. 2024 which aimed to provide firsthand insight into the industrial processes involved in steel manufacturing and the integration of mathematical models in industrial operations. During the visit, participants toured various plant sections, including the **Blast Furnace**, **Steel Melt Shop**, and **Rolling Mills**, where they observed the complex process of transforming raw materials into high-quality steel products.

The interaction with plant engineers and management provided valuable exposure to real-world mathematical modelling applications in optimising production processes and ensuring quality control. The visit also facilitated discussions on the importance of research and innovation in improving industrial efficiency, highlighting the role of advanced mathematical techniques in the modern industrial landscape.

MOUs

NIT Raipur and Rajiv Gandhi National Ground Water Training & Research Institute (RGNGWTRI)

NIT Raipur and **RGNGWTRI** have signed a Memorandum of Understanding (MoU) on 25th Nov. 2024. in the presence of **Dr. N.V. Ramana Rao**, *Director, NIT Raipur*, **Shri Nidhish Verma**, *Regional Director & HOO, RGNGWTRI*, and key dignitaries from both institutions. The agreement focuses on collaboration between RGNGWTRI and NIT Raipur, including a shared platform for interaction, joint dissertations and internships, promoting research and innovation, and publishing outcomes in journals like Bhujal News.

The partnership will enable collaboration in geophysics and geology, fostering innovation and academic exchanges. Both NIT Raipur and RGNGWTRI are optimistic about the outcomes, with the collaboration beginning immediately after the agreement is signed. **Dr. D.C. Jhariya**, *Associate Professor, DAG,* and **Dr. Chandan Kumar Singh**, *Assistant Professor, CE* will coordinate all collaborative activities between RGNGWTRI and NIT Raipur.

Academic Activities

Workshop on Green Technology and Climate Change Mitigation

Department of Chemical Engineering (DCE), **NIT Raipur & Central Institute of Petrochemicals Engineering & Technology (CIPET)**, **Raipur**, organized a one-day workshop titled **Green Technology Approach to Environmental Management & Climate Change Mitigation** on 18th Sep. 2024. The workshop aimed to foster discussion and practical knowledge sharing on sustainable environmental practices and climate change solutions. The event was graced by the *Chief Guest*, **Dr. Krishnamurthi Kannan**, *Chief Scientist, CSIR-NEERI, Nagpur*. **Dr. N.V. Ramana Rao**, *Director*, *NIT Raipur*, served as the *Chief Patron*, with **Dr. Alok Kumar Sahu**, *Principal Director* and *Head*, *CIPET, Raipur*, as the *Co-Patron*. In this event **Dr. J. Anandkumar** and **Dr. M. K. Tripathi**, *Associate Deans (R&C)*, other faculty members from both the institutes and participants were present.

Dr. Amit Keshav, *HoD*, *DCE*, introduced the event by outlining the theoretical and practical aspects of the workshop emphasizing the importance of environmental management. **Dr. Keshav** further highlighted the need for sustainable development and the adoption of green technologies to mitigate climate change. Furthermore, **Dr. Sahu** addressed the

audience, emphasizing the importance of practical approaches to the use of polymers and energy. **Dr. Rao** spoke about the concept of green technology, explaining how eco-friendly materials and practices can significantly reduce environmental impact. He highlighted the benefits of electric vehicles, renewable energy sources like wind and solar power, and the role of energy efficiency in decreasing greenhouse gas emissions. **Dr. Kannan** built upon the ideas presented by the previous speakers, discussing the critical role of green energy in addressing climate change discussing the broader challenges of air pollution, including its impact on stargazing, and highlighted the importance of projects like the DST's Carbon Capture and Climate Change Mitigation initiative.

The event concluded with a vote of thanks delivered by **Dr. J. Anandkumar**. The event provided a crucial platform for discussing practical approaches to environmental management and climate change mitigation, equipping participants with valuable knowledge to drive future sustainability efforts.

Guest Lecture and Workshop on AWS and Generative AI

Career Development Center (CDC), **NIT Raipur** hosted a workshop on **Amazon Web Services (AWS) and Generative Artificial Intelligence** on 23rd Sep. 2024, which featured a keynote address by **Stephan Howell**, *AWS Developer & Educator*. **Dr. Samir Bajpai**, *Head*, *CDC*, **Dr. Pradeep Singh**, *HoD*, *CSE*, **Dr. Jitendra Kumar Rout**, *Assistant Professor*, *CSE*, **Dr. Vivek Kumar Gaba**, *Associate Professor*, *ME*, **Dr. Deepak Singh**, *Assistant Professor*, *CSE*, other faculty members and students were present in the program.

Dr. Pradeep delved into various computer and software-related topics, including **Data Mastery**, **Cloud Computing** and **AI**, and their potential applications. **Dr. Bajpai** encouraged them to actively participate and benefit from the session. **Mr. Howell** shared his experiences in the teaching field and his subsequent transition to Computer Engineering and offered valuable insights into the world of coding and problem-solving, highlighting the significance of technical skills, strong academic performance, and coding proficiency for career success. He demonstrated cloud computing on his laptop, introducing Amazon Polly as a new feature in machine learning and highlighted the cost advantages of cloud computing and emphasized the simplicity of using cloud-based databases, such as AWS, to streamline development processes. He concluded his presentation with a reminder that many disabilities are not visible, highlighting the need for greater inclusivity and understanding. Additionally, a session was held on the topic **Hands-on Workshop on Gen AI Web Coding**. The workshop successfully provided attendees with a deep understanding of the technological advancements in cloud computing and generative AI, bridging theory with practical demonstrations.

Special Guest Lecture by Department of Architecture and Planning

Department of Architecture and Planning (DAP), **NIT Raipur** organised a special guest lecture on 25th Sep. 2024 which focused on educating the students and scholars about industrial and academic statistics on architecture and on research-based logistics and experiments in the field of Architecture and Planning. Professional practice and the new age trends were also discussed. Guests, who happen to be the alumni of the college were invited to share their invaluable experiences.
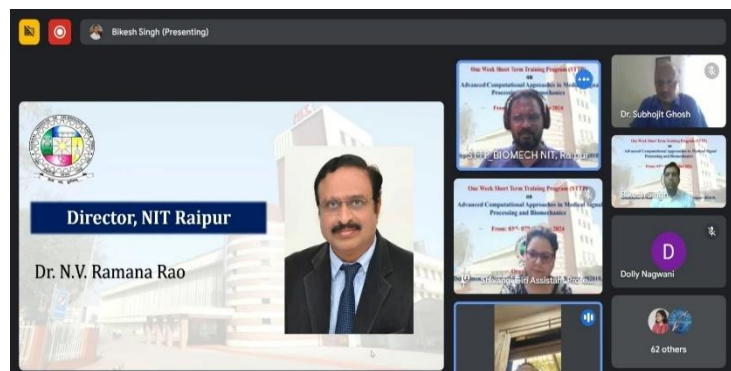

Dr. Quaizar Husain Kapadia, *Director*, *School of Architecture and Planning*, *Amity University*, *Raipur* introduced his projects made on Hospital Designs. **Creative approaches**, **Systematic Planning**, **Interaction of User Needs** and the **Architectural framework** were discussed and he further put light on the methods to a better approach to design for the students pursuing B.Arch & B.Plan. **Dr. Saikat Paul**, *Associate Professor*, *Department of Architecture and Regional Planning*, *IIT Kharagpur* shared his research publications and data on **GIS**, **Energy Efficiency**, **Remote Sensing**, **Sustainability and Inclusivity of Cities**, **Global trends** which are being followed worldwide and its impacts on the Indian research and technological advancements in the field of engineering and architecture. He further shared the need of learning the new research-based applications and artificial intelligence for the new generation of architects. **Ar.**

Kaushal Jadia, *Founder*, *Disha Architects*, *Navi Mumbai* demonstrated his journey and motivated the students to build a career in the field of industrial management and business. The event concluded with newfound knowledge and inspiration among the students and teachers.

STTP on Advanced Computational Approaches in Medical Signal Processing and Biomechanics

Department of Biomedical Engineering (BME), **NIT Raipur** successfully concluded its **Short-Term Training Program (STTP)** on **Advanced Computational Approaches in Medical Signal Processing and Biomechanics** with a valedictory session on 7th Oct. 2024. The workshop was started on 3rd Oct. 2024 and inaugurated by **Dr. N.V. Ramana Rao**, *Director*, *NIT Raipur*. This five-day workshop, attended by 28 participants from various parts of India, featured 30 sessions led by experts from esteemed institutions such as **IIT Bhilai**, **MANIT Bhopal**, **IIIT Naya Raipur**, **Pandit Ravishankar Shukla University Raipur** and **GSFC University**, **Vadodara**. The workshop offered a blend of theoretical knowledge and hands-on training, providing attendees with a thorough understanding of key topics in **Medical Signal Processing and Biomechanics**.

The valedictory session saw the presence of prominent dignitaries, including **Dr. Shubhojit Ghosh**, *Chairman*, *CEC*, **Dr. Arindam Bit**, *HoD, BME* and the Program Coordinators **Dr. Bikesh Kumar Singh**, *Associate Professor*, *BME*, **Dr. Nishant K. Singh**, *Assistant Professor, BME* and **Dr. Shivangi Giri**, *Associate Professor*, *BME* along with other faculty members and participants. **Dr. Ghosh** emphasized the department's dedication to pioneering research and encouraged participants to apply knowledge they had acquired. **Dr. Bikesh** provided a detailed overview of the workshop key sessions and highlights, while **Dr. Nishant** encouraged participants to build on the insights gained during the workshop and also stressed the importance of these

learnings in advancing the field of Biomedical Engineering. Participants shared their positive feedback, congratulating the workshop's comprehensive content and interactive sessions. Key topics covered included **EEG signal analysis**, presented by **Dr. Guhan**, *Professor*, *Amrita Vishwa Vidyapeetham Coimbatore*, **Different EEG signal applications** by **Prof. G. R. Sinha**, *Professor*, *GSFC University*, *Vadodra*, **Dr. Mitul Ahirwal***, Professor*, *MANIT Bhopal* , **Dr. Anurag Singh**, *Professor*, *IIIT Naya Raipur*, **Audio analysis** by **Prof. Kavita Thakur**, *PTSRU Raipur*, **Computational Biomechanics** by **Dr. Nishant** and **Dr. Shivangi**, **Materials in Medical Applications** by **Dr. Yagnesh**, *Professor*, *IIT Bhilai*; and The use of **Artificial Intelligence in the Medical Field** presented by **Dr. Bikesh**. The workshop concluded with a vote of thanks delivered by **Dr. Nishant**.

Hybrid Workshop on Quantum Computing and Algorithms

Department of Information Technology (IT), NIT Raipur organized a week-long hybrid workshop on **Quantum Computing and Algorithms** from 7th to 11th Oct. 2024. The workshop was inaugurated by **Dr. A. B. Soni**, *Director (I/C)* on 7th October 2024, while **Dr. Rajesh Doriya**, *Assistant Professor*, *IT*, and **Dr. Kapil Kumar Soni**, *Assistant Professor*, *IT*, served as *Event Coordinators*. The objective of the workshop was to acquaint participants with cutting-edge technologies and applications in quantum computing. Sessions covered topics such as **Quantum Algorithms**, **Quantum Design**, **Quantum Fundamentals**, **Quantum Communication**, **Algorithm Design & Networking**, and **Coding & Encryption**. Esteemed Expert's from *NIT Warangal, NIT Surathkal, NIT Bhopal, NIT Nagpur, NIT Raipur, Delhi Technological University (DTU) Delhi*, and other institutions shared their insights, contributing significantly to discussions in the field of quantum computing.

Dr. Subhojit Ghosh, *Chairman*, *CEC*, **Dr. Doriya**, **Dr. Kapil** and other faculty members were present at the valedictory ceremony. The *Chief Guest* of the event, **Dr. Ghosh** discussed about the importance of quantum computing and mentioned that this field is very effective in the present as well as in the future. Thereafter, the *Special Guest*, **Dr. Jitendra** said that

with the experiences of this workshop, he will be able to guide the students at his institute in a better way. He believes that by sharing this knowledge, students will develop an understanding of new ideas and techniques, which will prove helpful in their academic development. The workshop presented an excellent opportunity for participants to enhance their knowledge and skills in quantum computing. The event concluded with a certificate distribution ceremony and a vote of thanks delivered by **Dr. Kapil Soni**.

2nd International Conference on Artificial Intelligence, Computing Technologies, Internet of Things and Data Analytics

Department of Information Technology (IT), **NIT Raipur** inaugurated a three-day **2nd International Conference on Artificial Intelligence, Computing Technologies, Internet of Things (IoT), and Data Analytics (AICTA 2024)** from 15th to 17th Nov. 2024 in hybrid mode. **Dr. N.V. Ramana Rao**, *Director*, *NIT Raipur*, graced the inaugural occasion as the chief guest via online mode and unveiled the Conference Proceedings Abstract accompanied by esteemed guest of honor **Dr. Avinash Kumar Singh**, *Director of AI*, *Brane Enterprises LLM* and **Dr. Sanjay Kumar**, *HoD*, *IT & Chairman*, *AICTA*. The ceremony attracted participation of faculty members, research scholars as well as participants from different institutions.

Dr. Rajesh Doriya, *Secretary*, *AICTA 2024*, welcomed attendees, shared details of the conference, and noted 320 submissions across AI, Cybersecurity, and IoT from 1st Jul. to 8th Sep. 2024. After peer review by 130 experts, 62 papers (19.3%) were selected for oral presentations. **Dr. Rao**, in an audio message, highlighted the impact of AI, ML, and IoT on fields like precision medicine and officially opened the conference. **Dr. Rekh Ram Janghel**, *Assistant Professor, IT* extended the vote of thanks.

Day 1 of AICTA 2024 began with an address by **Dr. Avinash Kumar Singh**, *AI expert* with over 12 years of experience in AI, ML, computer vision, and NLP. **Dr. Singh** discussed generative AI, his initiative *Robaita*, and distinctions between traditional AI and generative models, referencing Marvin Minsky's work on neural advancements. **Dr. Rajkumar**

Buyya, *Professor*, *University of Melbourne*, presented on Advances in Cloud and Edge Computing featuring Manjrasoft's Aneka Platform, while **Dr. Ioannis Pitas**, *Professor, Aristotle University,* discussed Big Data Analytics for Natural Disaster Management. The three-day conference included 13 technical sessions, 3 special sessions, and a free workshop on Generative AI.

The valedictory ceremony featured **Dr. Pradeep Singh**, *HoD, CSE*, as Chief Guest, emphasizing interdisciplinary collaboration in AI research. **Dr. Himanshu Buckchash**, *Professor*, *The Arctic University of Norway*, delivered a keynote on advanced AI applications in healthcare and robotics. The day also included paper presentations on AI and IoT. The organizing committee, led by **Dr. Rajesh Doriya**, *Assistant Professor*, *IT*, **Dr. Gyanendra Kumar Verma**, *Assistant Professor*, *IT* and **Dr. Rekh Ram Janghel**, *Assistant Professor*, *IT* was praised for making AICTA 2024 a success. **Dr. Janghel** delivered a vote of thanks, and the ceremony ended with a sapling distribution.

Workshop on IoT-Health: IoT Enabling Technology, Security, and Its Application on Healthcare

Department of Information Technology (IT), **NIT Raipur**, organized a Five-Day workshop entitled **IoT-Health: IoT Enabling Technology, Security, and Its Application on Healthcare** from 9th to 13th Dec. 2024. Sponsored by **IBITF (NM-ICPS)**, **DST**, the workshop aimed to explore recent advances in IoT-enabling technologies, their applications in healthcare, and hands-on training opportunities. The program was graced by the *Chief Guest*, **Dr. N.V. Ramana Rao**, *Director*, *NIT Raipur*, and the *Guests of Honor*, **Dr. Anil Kumar Goel**, *AIIMS Raipur* and **Dr. Satyaprakash Sahu**, *Associate Professor*, *IT*. The event was chaired by **Dr. Sanjay Kumar**, *HoD, IT*, with **Dr. Rakesh Tripathi**, *Associate Professor*, *IT* and **Dr. Chandrashekhar Jatoth**, *Assistant Professor*, *IT* serving as program coordinators.

The program began with the lighting of the ceremonial lamp, followed by a welcome address by **Dr. Sanjay Kumar**, who

provided an overview of the training program. During the inaugural session, speakers **Dr. Anil Kumar Goel**, *AIIMS Raipur*, **Dr. Manas,** *AIIMS Raipur*, and **Dr. Saikat Majumder**, *Assistant Professor*, *ECE*, *NIT Raipur* highlighted critical topics, including **Severe Acute Malnutrition (SAM)**, global nutritional challenges, dietary deficiencies, and solutions to address malnutrition through IoT.

Dr. Rao, in his address, underlined the transformative potential of IoT in healthcare and its vast future applications. The workshop concluded with a valedictory ceremony honoured by the *Chief Guest*, **Mr. William Hanlon Jr.**, *Chief of Field Office*, *UNICEF India*, and the *Guests of Honor*, **Dr. Bal Paritosh Dash**, *Officer In-charge*, *UNICEF India*, and **Dr. Shrish Verma**, *Dean (Academics)*, *NIT Raipur*. **Mr. William Hanlon Jr.**, in his address, highlighted the critical role of technology in tackling societal challenges such as malnutrition.

The workshop featured hands-on training sessions and insightful lectures from an esteemed panel of experts, including **Dr. Anil Kumar**, *AIIMS Raipur*, **Dr. D.L. Gupta**, *AIIMS Raipur*, **Dr. Manas**, *AIIMS Raipur*, **Dr. R.K. Shyamasundar**, *IIT Bombay*, **Dr. Virendra Singh**, *IIT Bombay*, **Dr. Sangram Ray**, *NIT Sikkim*, **Dr. Ashish Patel**, *NIT Mizoram*, **Dr. R.V.B. Subramanyam**, *NIT Warangal*, **Dr. E. Suresh Babu**, *NIT Warangal*, **Dr. Venkata Ramana**, *IIT Tirupati*, **Dr. Sateesh Kumar P.**, *IIT Roorkee*, **Prof. Shrish Verma**, *NIT Raipur*, **Dr. Rakesh Tripathi**, *NIT Raipur*, **Dr. Bikesh Kumar Singh**, *NIT Raipur* and **Dr. Suvendu Rup**, *NIT Raipur*.

The workshop commenced with an engaging session on **Severe Acute Malnutrition (SAM)** in children on Day 1, led by **Dr. A. K. Goel**, **Dr. Manas**, and **Dr. S. Majumder**.On Day 2, the focus shifted to **IoT security**, **autonomous navigation**, and the **Internet of Medical Things (IoMT)**, with insights from **Dr. V. Singh** and **Dr. S. Ray**. Day 3 featured sessions on undiagnosed **vitamin and mineral deficiencies**, presented by **Dr. D.L. Gupta** and **IoT cryptography**, discussed by **Dr. R.K. Shyamasundar**. The discussions on Day 4 revolved around **IoT analytics**, **automation**, and **edge computing**, with contributions from **Dr. R.V.B. Subramanyam**, and **Dr. V. Ramana**. On the final day, Day 5, the workshop concluded with sessions on **IoT vulnerabilities** and **machine learning in healthcare applications**, delivered by **Dr. B. K. Singh**, **Dr. S. Rup**, and **Dr. S. Verma**. The valedictory session concluded with a vote of thanks by **Dr. Rakesh Tripathi** and a group photo session, bringing the workshop to a successful conclusion.

2ⁿᵈ National Chemical Conference on Nanotechnology and Environment (NCNE - 2024)

Department of Chemical Engineering (DCE), **NIT Raipur**, organized the **2ⁿᵈ National Chemical Conference** on **Nanotechnology and Environment (NCNE - 2024)** on 13th and 14th Dec. 2024 under the Mission Viksit Bharat Abhiyaan. The conference was inaugurated by **Dr. (Mrs.) A. B. Soni**, *Director (I/C)*, NIT Raipur, as the *Guest of Honor*, **Dr. Anil Verma**, *Professor*, *IIT Delhi*, as the *Chief Guest*, and **Dr. Vijaya Rangari**, *Professor*, *Tuskegee University*, *AL*, as the *Special Guest*.

At the inaugural session, **Dr. Amit Keshav**, *HoD, DCE*, discussed the positive and negative effects of nanotechnology, stressing the importance of separating nanomaterials to minimize environmental pollution for sustainable practices. **Dr. M. K. Tripathi**, *Associate Professor*, *MME*, emphasized that Nanotechnology and Environmental Sciences span across chemical engineering, materials engineering, biotechnology, physics, and chemistry. **Dr. Soni** highlighted nanotechnology's role in the industrial sector, focusing on its applications in solar energy, health monitoring, and catalytic reactions as an alternative energy source. **Dr. Rangari** encouraged students to engage in nanotechnology research, underscoring its transformative impact on national development.

The event culminated with the publication of the abstract booklet and the felicitation of the Chief Guest and special guests with mementos as a gesture of appreciation. **Dr. Anil Verma**, the keynote speaker, discussed the extraction and utilization of vanadium, highlighting the significance of semiconductors in daily life and the expansive scope of chemical engineering in industrial-scale production. He shared insights on Vanadium Redox Flow Batteries, detailing their charging, discharging, and circulation processes, while also emphasizing India's five-point renewable energy plan from COP26 (Glasgow, 2021) and the critical importance of sustainable energy solutions for the future.

The conference featured oral and poster presentations by researchers and students. On Day 2, The valedictory ceremony on Day 2 was graced by **Dr. Soni**, **Dr. Rangari**, and **Dr. Amit Keshav**. Session included the felicitation of winners for the best presentations. **Dr. Keshav** expressed gratitude for the collective efforts in making the conference a success. **Dr. R. Manivannan** delivered a vote of thanks, acknowledging the contributions of delegates, participants, and organizers. The event was coordinated by **Dr. Amit Keshav**, **Dr. Dharm Pal**, *Associate Professor*, *DCE* and **Dr. R. Manivannan**, *Associate Professor*, *DCE* with sponsorship from the **Dept. of Science and Technology - Anusandhan National Research Foundation** and co-sponsorship by **Chhattisgarh Council of Science and Technology (CCOST)**.

The NCNE-2024 Conference fostered interdisciplinary collaboration through presentations and discussions, advancing Nanotechnology and Environmental Sciences. The event concluded with *Jana Gana Mana* and a group photo, marking its success.

Research Frontier

Expert Lectures delivered by Institute Faculty/Staff

- **Dr. Tripti Swarnkar**, *Professor*, *MCA*, delivered an invited lecture on *Revolutionizing Healthcare: The Role of IoT in Enhancing Efficiency and Outcomes* in **AICTE-VANNI sponsored workshop on Role of IoT in Smart Manufacturing: Enhancing Efficiency & Connectivity** from 24th to 26th Sep. 2024 organized by *BIT AICTE IDEA LAB, Bhilai Institute of Technology*, CG.
- **Dr. Govardhan Bhatt**, *Assistant Professor*, *CE* delivered an expert lecture on *Sustainable cities at* **National conference on Chhattisgarh Green Summit 2024** organized by *NIT Raipur* and *VIBGYOR* on 3rd to 5th Oct. 2024
- **Dr. Govardhan Bhatt,** *Assistant Professor*, *CE* **delivered an expert lecture on** *Importance and role of water* **at Importance and role of water, a vedicperspective agenda** organized by *Sri Rawatpura Sarkar University*, *Raipur* on 5th Oct. 2024
- **Dr. Ayush Khare**, *Professor*, *DoP* delivered an invited lecture on *Energy Band-Offset Engineering in Carbon-Based Alkali Cation Perovskite Solar Cells: Pathways to Improved Efficiency* at **3rd International Conference on Functional Materials and Applied Physics (FMAP-2024)** organised by *SVNIT Surat* on 18th and 19th Oct. 2024.
- **Dr. Shashikanta Tarai,** Assistant Professor, HSS delivered an expert lecture on ***Bilingual Mind: Conceptualizing Neuroplasticity*** organized by the *Department of English*, *IIIT Naya Raipur* on 22nd October 2024.
- **Dr. Tripti Swarnkar**, *Professor*, *MCA*, delivered an invited lecture on *AI and its applications in Bio Medical Engineering* in **One Day National Level Technical Seminar on AI / ML & its applications** on 28th Oct. 2024 organized by *MNM Jain Engineering College*, *Chennai*.
- **Dr. Govardhan Bhatt**, *Assistant Professor*, *CE* delivered an expert lecture on *Sustainable Water Resources Management and Environmental Protection* at **1st National Conference Innovative Strategies for Sustainable Water Resources Management and Environmental Protection in Civil Engineering** organized by *Lakhmi Chand Institute of Technology* on 12th and 13th Nov. 2024.
- **Dr. Tripti Swarnkar**, *Professor*, *MCA*, delivered an invited lecture on *Predictive Minds: The Role of AI in Mental Health Forecasting* in **One-week FDP on Mental Health and AI: Innovation in Detection, Treatment and Support** from 7th to 14th Nov. 2024 in online mode organized by *Chitkara University*, *Himachal Pradesh*.
- **Dr. Govardhan Bhatt**, *Assistant Professor, CE* delivered an expert lecture on *Fire-resistant analysis and design of structures* at **Advancements in geoenvironmental engineering and sustainable infrastructure development** organized *by Rungta College of Engineering and Technology*, *Bhilai* held from 18th to 23rd Nov. 2024.
- **Dr. Govardhan Bhatt**, *Assistant Professor, CE* delivered an expert lecture on *Eco-friendly ductile cementitious composite: bendable concrete for sustainable development* at **Advancements in geo environmental engineering and sustainable infrastructure development** organized by *Rungta college of engineering and technology*, *Bhilai* held from 18th to 23rd Nov. 2024.
- **Mr. Dilip Kumar Chandra**, *PhD Scholar & Senior Technician*, *DBT, NIT Raipur* delivered an expert lecture delivered on **Hand on-experiment (Extracting DNA from a strawberry), share experiences, spark curiosity and Science Quiz** at **Science Circle Activity under PM Shri Program** organized by *PM Shri School Jawahar Naovdaya Vidyalaya, Borai, Durg* on 30th Nov. 2024.

- **Dr. Aakanksha Sharaff**, *Assistant Professor*, *CSE* delivered an invited lecture on *Introduction to Gen AI* at **Workshop on Applications of Deep Learning and Generative AI in Computer Vision and NLP Tasks** organised by *MANIT Bhopal* on 3rd Dec. 2024.

Patents

- A Patent titled **Low-Cost Multi-Layer Water Filter for Drinking Water in Rural Areas**, filed by **Dr. Ishtiyaq Ahmad**, *Assistant Professor*, *CE* was published by the Patent Office, Government of India, on 23rd Aug. 2024.

Awards, Recognition, and Fellowship

- **Dr. Tripti Swarnkar**, *Professor*, *MCA* served as a Faculty In-charge of **IEEE Returning Mother Conference- 2024 (RMC-2024)** hosted by **Ideathon & Pitchfest Track Chair** at *Indian Institute of Science*, *Bengaluru* from 15th to 16th Nov. 2024.
- **Dr. Aakanksha Sharaff**, *Assistant Professor*, *CSE* has been awarded **IEI Young Engineer's Award 2024-25** in the **37th National Convention of Computer Engineers** organised on 22nd and 23rd Nov. 2024 at *Chandigarh*.

Sponsored Research Projects

- A project titled *Remote Sensing and GIS Mapping for the development of Sirpur Heritage Site* by **Dr. Govardhan Bhat**, *PI and Assistant Professor Grade-I, CE*, **Dr. Himanshu Goyal**, *CO-PI* and **Dr. R. B. Malathy**, *CO-PI* sanctioned by **SADA Sirpur**, **Chhattisgarh**, Grant of Rs. 58,20,920/- for the period of 2024-27.
- A project titled *Technical Assistance to State Governments for O&M of Climate-Resilient Safely Managed Water Supply in Chhattisgarh* by **Dr. Govardhan Bhat**, *PI and Assistant Professor Grade-I, CE* and **Dr. Chandan Singh**, *CO-PI and Assistant Professor Grade-I, CE* has been sanctioned by **UNICEF**, Grant of Rs. 32,40,000/- for the period of 2024-25.
- A project titled *Site Inspection of Intake Well Situated*, *Kusmi Village, Balrampur, Chhattisgarh* by **Dr. Ishtiyaq Ahmad**, *PI & CO-PI*, sanctioned by **Public Health Engineering Department (PHE)**, **Balrampur**, Grant of Rs. 1,53,400/- for the period of June-2024.

Ph.D. Thesis Defended

- **Mr. Nilesh Kumar Sharma** defended his Ph.D. thesis entitled *Numerical study of jet flow characteristics and its erosion behaviour for abrasive slurry jet machining (ASJM) applications* under the supervision of **Dr. Satish Dewangan**, *Associate Professor, ME* and **Dr. Pankaj Kumar Gupta** on 8th Aug. 2024.
- **Mr. Rajesh Kumar Das** defended his Ph.D. thesis entitled *Evolution of an empirical model for estimation of rock fragmentation in limestone quarry blasting* under the supervision of **Dr. P. Y. Dhekne**, *Professor, DME* on 9th Sep. 2024.
- **Mr. Prashant Shukla** defended his Ph.D. thesis entitled *Design and Development of Intelligent Models for Management of Fog based IoT* under the supervision of **Dr. Sudhakar Pandey**, *Professor, IT* on 16th Sep. 2024.
- **Mr. Amit Kumar** defended his Ph.D. thesis entitled *On Reverse and Forward Order Laws* under the supervision of **Dr. Debasisha Mishra**, *Associate Professor*, *DoM* on 19th Sep. 2024.
- **Ms. Komal Chandrakar** defended her Ph.D. thesis entitled *Design and synthesis of novel benzimidazole based 1,2,4 -triazoles, quinolone based 1,2,3-triazoles and poly-substituted pyrrole derivatives and their biological evaluation* under the supervision of **Dr. Santhosh Penta**, *Assistant Professor*, *DoC* on 19th Sep. 2024.
- **Ms. Bhanupriya Mishra** defended her Ph.D. thesis entitled *Assessment of vascular damages of type-2 diabetes mellitus using Photoplethysmogram* under the supervision of **Dr. Neelam Shobha Nirala**, *Assistant Professor*, *BME* on 3rd Oct. 2024.
- **Mr. Jeevan Lal Patel** defended his Ph.D. thesis entitled *Design and synthesis of pyrrolyl-pyrimidines tethered1,3,4-oxadiazoles, quinazolinone-tethered 1,2,3-triazoles and coumarinyl based imidazoles as potential antimicrobial targets* under the supervision

of **Dr. Santhosh Penta**, *Assistant Professor*, *DoC* on 7th Oct. 2024.

- **Ms. Divya Singh** defended her Ph.D. thesis entitled *Computerized Diagnosis of Asthma and Chronic Obstructive Pulmonary Disease using Machine Learning Techniques* under the supervision of **Dr. B.K.Singh**, *Associate Professor*, *BME* on 21st Oct. 2024.

- **Mr. Anil Kumar Mandle** defended his Ph.D. thesis entitled *Computer-Aided Diagnosis for Brain Tumor using Machine and Deep Learning Techniques* under the supervision of **Dr. Govind P. Gupta**, *Assistant Professor*, *IT* and **Dr. Satya Prakash**, *Associate Professor*, *IT* on 27th Oct. 2024.

- **Mr. Renu Premjani** defended his Ph.D. thesis entitled *Study of vertical, lateral and combined loads on vertical pile, batter pile and pile group in cohesionless soil* under the supervision of **Dr. L. K. Yadu**, *Professor*, *CE* on 8th Nov. 2024.

- **Mr. Aditya Narayan Tiwari** defended his Ph.D. thesis entitled *Green Fabricated Bare and MgO Modified Magnetic Nanoparticles for the Removal of Dyes and Uranium (VI) ion Isotherm Kinetic and Thermodynamic study* under the supervision of **Dr. Kavita Tapadia**, *Associate Professor*, *DoC* and **Dr. Chandrakant Thakur**, *Assistant Professor*, *DCE* on 8th Nov. 2024.

- **Ms. Sneha Tomar** defended her Ph.D. thesis entitled *Synthesis and Characterization of Metal Organic Framework for Supercapacitor Applications* under

the supervision of **Dr. V. K. Singh**, *Professor*, *DCE* on 14th Nov. 2024.

- **Ms. Swati Chandrawanshi** defended her Ph.D. thesis entitled *Production and Optimization of High-Value Bioproducts from Lignin using Microbial Depolymerization* under the supervision of **Dr. J. Anand Kumar**, *Associate Professor*, *DCE* on 19th Nov. 2024.

- **Mr. Rupesh Kumar Verma** defended his Ph.D. thesis entitled *Development and Characterization of Functionally Graded Aluminum Matrix Composite by Indigenously Designed Horizontal Centrifugal Casting* under the supervision of **Dr. Manoj Chopkar**, *Professor, MME* on 26th Nov.2024.

- **Mr. Saurabh Bhattacharya** defended his Ph.D. thesis entitled *IoT Driven Semantic framework and Decision support system for precision farming* under the supervision of **Dr. Manju Pandey**, *Associate Professor*, *MCA* on 26th Nov. 2024.

- **Mr. Abhishek Malviya** defended his Ph.D. thesis entitled *An Optimized Model for 5G Heterogeneous Cloud Radio Access Networks (H-CRAN)* under the supervision of **Dr. Sudhakar Pandey**, *Professor*, *IT* on 27th Nov. 2024.

- **Mr. Deepak Suresh Asudani** defended his Ph.D. thesis entitled *Exploring Deep Learning Architectures for Improving Knowledge Discovery in Visual Question Answering Systems* under the supervision of **Dr. N.K. Nagwani**, *Professor*, *CSE* and **Dr. Pradeep Singh**, *Associate Professor*, *CSE* on 4th Dec. 2024.

Research Publications

- **Dr. Sapan Mohan Saini**, *Professor*, *DoP* and **Ms. Lokanksha Suktel,** *Research Scholar*, *DoP* and have published a journal titled **Thermoelectric performance of newly discovered LiHfPdZ (Z= Al, Ga, and In) quaternary Heusler compounds: A DFT study**, in **Physica B: Cond Matt, 690 (2024) 41626**.

- **Dr. Sapan Mohan Saini**, *Professor*, *DoP* and **Ms. Lokanksha Suktel**, *Research Scholar* and have published a journal titled **Comparative analysis of electronic**, **mechanical, vibrational, thermodynamical and thermoelectric properties of Li based quaternary Heusler's LiNbRhAl, LiNbRhGa and LiNbRhIn alloys: A DFT study** in, **Computational Condensed Matter, 42 (2025) e00987s**

- **Dr. Sapan Mohan Saini**, *Professor*, *DoP* and **Ms. Shreya Mahta**, *Research Scholar* have published a journal titled **Transport and optical study of mechanically stable novel RNiSb (R= Tb, Dy, Tm) half-Heusler compounds for thermoelectric and optoelectronic applications** in **Physica Scripta (2024) DOI**.

- **Dr. Chinmaya Mahapatra**, *Assistant Professor*, *DBT*, **Dr. Awanish Kumar**, *Associate Professor*, *DBT*, **Mr. Dilip Kumar Chandra**, *PhD Scholar*, received the acceptance of a book chapter titled **Ecofriendly bioplastics from biowaste: Antimicrobial and functional enhancements for sustainable packaging** to be published in **European Polymer Journal**, **Elsevier.**

- **Dr. Khalid Raza**, *Associate Professor*, *Jamia Millia Islamia (Central University)*, **Dr. Naeem Ahmad**, *Assistant Professor*, *MCA* and **Dr. Deepak Singh**, *Assistant Professor*, *CSE* received acceptance of a book chapter titled **Generative AI: Current**

Trends and Applications for the upcoming book **Springer** (**Part of the book series**: **Studies in Computational Intelligence (SCI, volume 1177).**

- **Dr. Tripti Swarnkar**, *Professor*, *MCA* received the acceptance of a book chapter titled **Harnessing machine learning technique to authenticate differentially expressed genes in oral squamous cell carcinoma** to be published in **Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology, Elsevier (Oct 2024).**

- **Dr. Tripti Swarnkar**, *Professor*, *MCA* received the acceptance of a book chapter titled **DnnARs:An Artificial Intelligence Technique for Prediction of Antimicrobial Resistant Strains in E. coli Bacteria Causing Urine Tract Infection** to be published in **SN Computer Science. 2024 Dec;5(8):16**

- **Dr. Tripti Swarnkar**, *Professor*, *MCA* received the acceptance of a book chapter titled **Comparative exploration of deep convolutional neural networks using real-time endoscopy images** to be published in **Biomedical Technology. 2024 Dec 1; 8:1-6.**

Students' Corner

- **Rishabh Ranjan Jha**, *3rd Sem.*, *BME*, **Vishnu Dixit**, *3rd Sem.*, *ME* and **Aman Kumar Sharma** *3rd Sem.*, *EE* secured 2nd place for their project **Smart Electrolyte Level Monitoring System** in the prestigious **Young Innovators Award 2024** at the **7th InnoHEALTH International Conference** organized by **InnovatioCuris** and held at the *Indraprastha Institute of Information Technology, Delhi (IIIT Delhi).*

- **Team Pioneers** comprising **Milind Kumawat** *3rd Sem.*, *DCE*,

Kritarth Karambelkar, *3rd Sem.*, *DME*, **Shantanu Gouraha**, *3rd Sem.*, *ME*, **Naman Bhatnagar** *3rd Sem.*, *DME* and **Ayush Agrawal**, *3rd Sem.*, *DME* secured 2nd place at the **Startup Expo: Case Competition** during **Rendezvous'24**, *IIT Delhi*. The team collaborated with **Prakhar Shrivastav**, *Founder*, *IITian Clothing Store* to prepare a comprehensive business deck for his startup and present it to a panel of venture capitalists and investors.

- **NIT Raipur football team** emerged as champions in the **Inter NIT Football Tournament 2024** organized by **NIT Rourkela** from 18th to 20th Oct. 2024.

- **Sameer Srivastava**, *3rd Sem.*, *DBT*, won the 7th Edition of the **International Model United Nations - Youth Parliament (IMUN - YP)** under the category of **Special Mention**, organized by **Hidayatullah National Law University**, *Naya Raipur*, during Colossus 2024, from 18th to 20th Oct. 2024.

Club/Committee Activities

National Air Force Day Celebration

Aviation Club, **NIT Raipur** celebrated **National Air Force Day**. During this, **Shri C.H. Kulkarni**, *Ex Air Force Officer* was present as the keynote speaker. The main objective of this program was to provide information about the **Indian Air Force** to the participants, encourage them to make a career in this field and provide modern information related to this field. This program was organized under the guidance of **Dr. N. V. Swami Naidu**, *Faculty In-Charge*, *Aviation Club*. During the

keynote session, **Shri Kulkarni** motivated everyone to join the Defence forces and said that at present many modern and technological changes are being seen in the aviation world. He provided many information related to recruitment in the defence forces and said that to get recruited in the defence forces, one can participate in examinations like NDA or CDS, for which they must have some basic qualities like bravery, honesty, good character etc.

Apart from this, the club also organized a **Quiz Competition** and **Model Making Competition**. In the **Quiz Competition**, questions related to the history of the Indian Air Force, its famous missions, etc and in the **model making competition**, models of various fighter planes were made by the participants. In the **Quiz Competition**, **Avinash Kumar** stood 1st, **Aryan Rathore** 2nd and **Priyanshu Maurya** 3rd. Whereas,

in the **Model Making Competition**, **Team Patriotic** stood 1st, **Pankaj and Team** 2nd and **Team Circuit Breaker** 3rd.

Green Library 2024 by Go Green

Go Green - The Eco Social Committee, **NIT Raipur** organized a unique event called **Green Library** on 13th Oct. 2024 in a bid to foster sustainability and knowledge-sharing. The event was guided by **Dr. D. C. Jhariya**, *Associate Professor*, *DAG*, **Dr. G.P. Gupta**, *Assistant Professor*, *IT* and **Prof. Kabita Biswas Sharma**, *Assistant Professor*, *DAP*. This initiative is a project that combines environmental consciousness with academic enrichment which aimed to collect old books, journals, and stationary materials donated by faculty, staff, and students to redistribute them to those in need, thereby promoting the idea of reusing educational resources.

The event saw participation from various members of the **NIT Raipur** community, including several alumni, who donated their educational materials. More than 300 books were collected and redistributed among students. This initiative contributed to the academic growth of the institution and also underscored the importance of sustainable practices and environmental awareness among the students. The event was well-attended and received positive feedback from both donors and recipients.

BIZFEST 2024 by E-Cell

Entrepreneurship Cell (E-Cell), **NIT Raipur** organized **BIZFEST 2024** on 19th Sep. 2024 which introduced students to entrepreneurship through interactive activities, speaker sessions with successful entrepreneurs, and practical startup

knowledge. The speakers for the session were **Mr. Parminder Sahni** and **Mr. Taranbir Sahni**, *Co-Founders*, *vSnapU* and **Mr. Irrfan Ahmed**, *Founder*, *Tapri – The Chakafe*. The event emphasized leveraging **E-Cell's** resources to overcome challenges in launching and running businesses.

I-Cell

Workshop on Element methods to Advanced material and Aerospace applications

Innovation Cell, **NIT Raipur** organised an I-Talk session titled **Workshop on: Element methods to advanced material and Aerospace applications** on 17th Sep. 2024 with keynote speaker **Dr. N. V. Swamy Naidu**, *Professor*, *ME*.

Dr. Naidu gave the session on the significance of the tools used in each step of the design process. He emphasised that design thinking is not merely a theoretical subject but requires hands-on experience with each stage to develop effective solutions.

Workshop On Deep Learning in AI & Robotics

Innovation-Cell, **NIT Raipur** organized a workshop on **Deep Learning in AI & Robotics** on 10th Nov. 2024. The workshop was graced by **Dr. Samir Bajpai**, *Head*, *CDC*, **Dr. Rajesh Doriya**, *Faculty (I/C), Robotix Club*, and **Dr. Ramya Selvaraj**, *Assistant Professor*, *EE*. The session featured **Mr. Apar Gupta**, *Founder*, *Blu Ocean Innovations*, as the Guest Speaker.

The workshop commenced with opening remarks by **Dr. Bajpai**, who spoke about the importance of technology and the roles of the **Innovation Cell**, **Entrepreneurship Club**, **Robotix Club**, and other technology-related clubs at NIT Raipur. He elaborated on how these platforms foster innovation, encourage entrepreneurship, and equip students

with skills to address real-world challenges. Following the introduction, **Mr. Gupta** discussed challenges in securing grants and investments, especially in medical dermatology. Drawing from his experience with the *Microsoft Reactor Series* and B2B strategies, he highlighted the importance of addressing industry pain points. He also spoke about ethical AI practices, sharing insights from his work with **ARTPARK**.

The workshop concluded with an interactive Q&A session. **Mr. Gupta** showcased a model to reduce space debris. A sapling was presented to the Guest speaker by **Dr. Selvaraj** as a token of appreciation.

Garba Eve - Rangtaari 2024 by Nrityam

Nrityam – The Dance Club, **NIT Raipur** organized the **Garba Eve - Rangtaari** on 6th Oct. 2024. **Dr. A. B. Soni**, *Director (I/C)*, *NIT Raipur* graced the event as the Chief Guest. **Dr. Nitin Jain**, *Dean (SW),* faculty members, staff, family members and students were also present in this program.

The event started by worshipping Maa Durga. An attractive presentation of a group Garba dance was given by the members of **Matrishakti Group** of **NIT Raipur**. The members included **Mrs. Poonam Raghuvanshi**, **Mrs. Rashmi Diwan**, **Mrs. Jaya Srivastava**, **Mrs. Anita Sahu**, **Mrs. Shikha Dewangan**, **Mrs. Pranita Sonkar**, **Mrs. Sunita Kumar**, **Mrs. Sulakshana Mukti**, **Mrs. Mona Bikarol**. An attractive dance was also presented by the children of the group. After this, the members of **Nrityam Club** gave a wonderful presentation of **Bolly Garba** and **Salsa Garba**, which made the atmosphere pleasant.

After these performances, the event was open to all and all the students and teachers participated in Garba with joy. Wearing Ghaghra-Choli and Kedia costumes, the students kept dancing to songs like *Kesario*, *Dhaulida*, *Nagada Sang Dhol Baje*. In this way, a wonderful evening of Garba was celebrated full of enthusiasm and vibrant colors.

Raaga's Musical Event- Shruti 2024

Raaga-The Music Club, **NIT Raipur** organized **Shruti'24** on 13th Nov. 2024. **Dr. N. V. Ramana Rao**, *Director, NIT Raipur,* was the *Chief Guest*, with **Dr. Nitin Jain**, *Dean (SW)*, as the *Guest of Honour.* The program was organized under the supervision of **Dr. S. Sanyal**, *Professor In-Charge, Raaga,* **Dr. Ayush Khare**, *Faculty In-charge, Raaga,* and **Dr. Nitesh K Bharadwaj**, *Faculty In-charge, Raaga.*

The program celebrated India's diverse musical heritage, featuring devotional, retro, rock, and 90s mashup songs like *Bhare Naina*, *Guzarish*, and *Crazy Kiya Re*. The performances mesmerized the audience, fostering unity and connection among guests from all backgrounds.

Hindi Karyashala by Rajbhasha Samiti

Rajbhasha Samiti, **NIT Raipur** organized a **Hindi Karyashala** on 30th Sep. 2024 under the guidance of **Dr. Sapan Mohan Saini**, *Faculty In-charge*, *Rajbhasha Samiti* which was honoured by the presence of Chief Guest **Mr. Nikesh Kumar Pandey**, *Member Secretary*, *Municipal Language Implementation Committee*, *Raipur*, and *Language Officer*, *South East Central Railway*, *Raipur*. Other faculty members, Staff and students were present in the event.

Mr. Pandey emphasized the critical role of Hindi as an official language and the challenges many students face when primarily educated in English during their formative years. He discussed the Hindi examinations—**Prabodh**, **Praveen**, and **Pragya**—intended for those who have not formally studied Hindi and provided a comprehensive overview of the *Rajbhasha's* significance in governance. Additionally, he discussed Article 344, which mandates the formation of a committee to promote the Hindi language, and Article 345, which allows states to adopt their official languages. The workshop also touched upon the 1976 **Rajbhasha Act**, which laid down 12 rules to further govern the use of Hindi, including the responsibilities of the central government to promote Hindi as a representation of India's composite culture. The event concluded with **Dr. Saini** presenting a memento to **Mr. Pandey**. **Dr. Saini** reinforced the importance of celebrating

initiatives like the **Karyashala**, stressing that language serves as a medium of communication and should not be seen as a measure of one's knowledge.

Rajbhasha Samiti organised another **Hindi Karyashala** on 28th Nov. 2024 which aimed at promoting the use of Hindi in technology and official communications. The event was graced by the **Mr. Bhupendra Pandey**, *Senior Translator*, *Central GST*, *Raipur* as the Chief Guest. Faculty members, staff and students enthusiastically participated in the event. The workshop was conducted under the guidance of **Dr. Sapan Mohan Saini**. **Mr. Pandey** shared valuable insights on the transformative role of **Unicode**, A revolutionary technology in the field of information technology that has standardized alphabets of various language globally. **Dr. Saini** reiterated the significance of such workshops in bridging the gap between technology and language, ensuring Hindi's continued relevance in the digital age. At the end of the program **Dr. Saini**, thanked the **Dr. Rao**, *Director*, *NIT Raipur* for organising the workshop and gave a message to everyone to contribute in the promotion of Hindi. The event concluded with **Dr. Saini** presenting a memento to **Mr. Pandey** as a token of appreciation.

Workshop on Human-Computer Interaction (HCI) and Robotics Vision by Robotix

ROBOTiX Club, **NIT Raipur** organized a workshop on **Human-Computer Interaction (HCI) and Robotics Vision** on 16th Nov. 2024. The event was graced by the presence of the Chief Guest **Dr. Avinash Kumar Singh**, *AI expert*, under the guidance of **Dr. Rajesh Doriya**, *Faculty (I/C), Robotix Club.* **Dr. Rajesh Doriya** introduced the session, highlighting **Dr. Avinash Kumar Singh's** work in AI and Robotics. **Dr. Avinash** discussed the significance of Human-Computer Interaction (HCI), its applications like gesture recognition, and future developments. He also explained Robotics Vision, citing examples like Meta's Orion AR Glasses and Google VR Glasses. During the interactive session, **Dr. Avinash** emphasized breaking complex problems into smaller tasks for effective solutions. The seminar inspired students to explore opportunities in HCI and Robotics Vision.

Traditional Day by Sanskriti

Sanskriti-The Cultural Committee, **NIT Raipur** organized Traditional Day, as a part of Pre-Diwali celebrations, on 28th Oct. 2024. The event was organised under the guidance of **Dr. Lata S. B. Upadhyay**, *Faculty In-Charge*, *Sanskriti*, **Dr. S. Pramanik**, *Faculty In-Charge*, *Sanskriti* and **Dr. Neha Gupta**, *Faculty In-Charge*, *Sanskriti*. People dressed in ethnic attire participated in the event, which began with **Rangoli Art** and **Mehendi Art** competitions. The ceremonial Lantern lighting was led by Chief Guest **Dr. (Mrs.) A. B. Soni**, *Director (I/C)*, and Special Guest **Dr. Nitin Jain**, *Dean (SW)*, along with faculty members and students.

Performances by **Raaga-The Music Club** and **Nrityam-The Dance Club** followed, along with a **Traditional Walk** showcasing students in traditional outfits. The event highlighted India's cultural roots and unity in diversity.

Turing Club of Programmers (TCP)

Guidance session for competitive programming

Turing Club of Programmers (TCP), NIT Raipur organised a guidance session for competitive programming in collaboration with **TLE Eliminators** on 5th Oct. 2024. It introduced students to the world of competitive programming and algorithmic excellence. **Mr. Priyansh Aggrawal**, *Founder, TLE Eliminators* was the speaker for the event. He discussed a range of topics, from solving complex problems to excelling in global coding competitions. The session offered students insights on navigating their way into top tech

companies like Google, along with expert strategies to enhance their problem-solving skills.

Codeutsava 8.0

Turing Club of Programmers (TCP), **NIT Raipur** organized its annual flagship event, **Codeutsava 8.0** - a 28 hour long nationwide hackathon, spanning across two days, from 26th Oct. 2024 to 27th Oct. 2024. The inaugural ceremony on 26th Oct. 2024 witnessed the presence of **Mr. Jitendra Pratap Singh Chauhan**, *General Manager*, *C&IT-ERP*, *SAIL*, **Dr. N.V. Ramana Rao**, *Director*, *NIT Raipur*. **Dr. Samir Bajpai**, *Head*, *CDC* as the Chief Guest and **Dr. Sanjay Kumar**, *HoD*, *IT* also attended the event. This event was put to execution under the guidance of **Dr. Pavan Kumar Mishra**, *Professor In-Charge*, *TCP*. **Dr. Rao** implored the students to prepare for jobs of the future by means of emerging technologies, while also maintaining the diversity inclusion of underprivileged sections, from where ambassadors of technical advancement may rise based on skill. **Mr. Chauhan** enlightened the audience with the changing technological, social and economic landscape of the country, its rise to become the IT & manufacturing powerhouse of the world and importance of improving efficiency at every step of the value chain. **Dr. Sangram Ray**, *Associate Professor*, *NIT Sikkim*, **Dr. Rahul Chaurasiya**, *Assistant Professor*, *MANIT Bhopal* and **Dr. Rishav Dubey**, *Assistant Professor*, *Manipal University*, *Jaipur* were the judges of hackathon.

Inspired by the motto of *Code, Innovate, Celebrate* and this year's retro pixel art theme, this year more than 2000 participants from 550 teams applied for the contest, out of which more than 150 participants from 40 teams were selected for the contest. Out of these total 40 teams, 20 were from NIT Raipur and the remaining 20 were from various colleges of India. The winners of this contest were awarded with cash prizes worth Rs 1.60 lakh.

On the second day of the hackathon, the closing ceremony took place in which **Mr. Abhinash Mishra**, *Commissioner*, *Municipal Corporation*, *Raipur* graced the event as the Chief Guest. **Dr. Rao** and **Dr. Shrish Verma**, *Dean (Academics)*, *NIT Raipur* were also present in the ceremony. **Mr. Mishra** reminisced about his hostel days in **IIT Kharagpur** and the growing culture of coding, startups and hackathons back then and expressed his sincere faith in the new age coders & techies that are ruling the world. He called upon the students with innovative ideas to contribute in the administrational & executional problems of the government.

The overall **winner** of the hackathon was **Team 4i** from **FRCC Mumbai**, which worked on detection of types & ratio of minerals present in rock samples and providing analytics for the same. **Team Not Found** from **NIT Raipur** took the **runners up** position with their project on creating a VR & AR experience for elderly people who feel lonely and misinformed. Whereas **Team Astatine** from **NIT Rourkela** grabbed the **second runners up** position by designing a social media algorithm by means of which drug trafficking and its dealers might be located, flagged and caught. While in the problem statement categories, **Team Deadlock Warriors**, **Team Malaai**, **Team Elite**, **Team MinGWx86**, **Team J.A.R.V.I.S.** and **Team Binary Bots** were the category winners. While in the open innovation category, **Team Potato Coders** was the winner.

Alumni Achievements

- NIT Raipur's intelligentsia have once again proved their mettle & extraordinary abilities by securing top spots in UPSC Civil Service Exam 2023.

AIR 202	Anusha Pillay (MME/2021)
AIR 313	Mayank Dubey (CE/2016)
AIR 443	Prachi Rathi (ME/2020)
AIR 452	Abhishek Dange (ME/2016)

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.**

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