THE QUARTERLY NEWSLETTER OF NIT RAIPUR

Mirror

Reflecting the True Spirit of NIT Raipur

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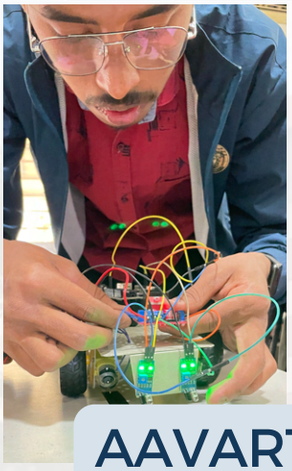

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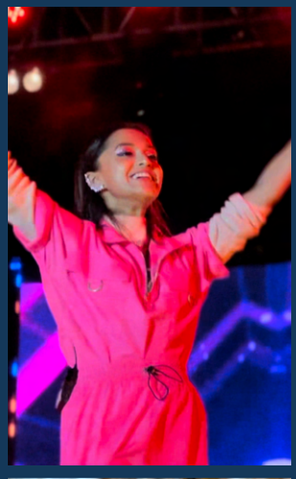
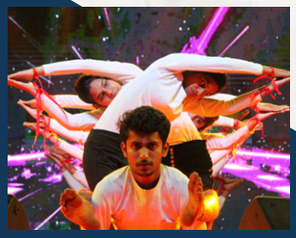

ECLECTIKA 23

ARCHIFEST 23

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NIT Raipur first at All India Sports Meet

श्रीलंकाई गायिका योहानी के गानों की धूम

महोत्सव ● एनआइटी के सांस्कृतिक कार्यक्रम इक्लेक्टिका-23 में प्रतिभाओं का हुआ सम्मान

एनआईटी में दो दिनी टेक्निकल फेस्ट आवर्तन

रोबोट रेसिंग और ट्रेजर हंट का महा रोमांच आज से

पत्रिका Plus रिपोर्टर

NIT Raipur commences its Annual Cultural Fest Eclectika'23

सभी महिलाओं की शिक्षा बहुत जरूरी : प्रो. सोनी

एनआईटी की निदेशक डॉ. श्रीमती अनुपम बाला सोनी से चर्चा

गेट: 60 से ज्यादा स्टूडेंट्स सफल

एनआईटी के प्रियांशु को 6वीं व योगेश को मिली 9वीं रैंक

एनआईटी के छात्रों का कमाल : अब आंखों के इशारों से चलेगा कंप्यूटर

अब माउस की जरूरत नहीं, आंख के पलक झपकाने से होता है क्लिक, विजनरी एप लकवा ग्रसित लोगों के लिए वरदान साबित होगा

एनआइटी के विजेता छात्रों का सम्मान

इवेंट : एनआईटी में वार्षिक सांस्कृतिक उत्सव इक्लेक्टिका शुरू

डांस में किया योगा का फ्यूजन, फेस पेंटिंग से ग्रीनरी का मैसेज

NIT Raipur organised Codeutsava 6.0

तकनीकी उत्सव पेड़ों की गिनती करने जैसे आकर्षक माडलों का किया गया प्रदर्शन

एनआइटी के छात्रों ने किया रोबोट हेल्पर का प्रदर्शन

NIT Raipur bags various accolades in All India Inter-NIT Faculty & Staff Sport Meet

ATAL FDP on 'Agri-food supply chain management' organised at NIT

NIT organises 'Annual Alumni Day 2022' meeting session

राष्ट्रीय प्रौद्योगिकी संस्थान रायपुर में टेड टॉक 6.0 का आयोजन

NIT Raipur organises annual fest 'Archifest '23'

NIT hosts guidance session on Civil Services Exam

NIT Raipur celebrates Republic Day and inaugurated SAMAR'22

फाउंडेशन डे एनआईटी में मनाया स्थापना दिवस, विभिन्न क्षेत्रों में बेहतर काम करने वालों को मिला अवॉर्ड

सालभर में एआई और मशीन लर्निंग के 17 पेपर पब्लिश, मिला बेस्ट रिसर्चर अवॉर्ड

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NIT Raipur students grab handsome Rs 22.65 LPA pre-placement offers

■ Staff Reporter

RAIPUR, Mar 12

FINAL year students of National Institute of Technology (NIT), Raipur grabbed outstanding offers of

Arnav Tripathi Vishnu Verma

pre-placement offer of Rs 22.65 LPA CTC. Born and brought up in Raipur, Arnav decided to study at NIT Raipur with his vision already inclined towards analytics. He also secured this placement offer through the National Level Competition

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■ Friday ■ March 24 ■ 2023 TheHitavada

NIT students bag offer from Amazon, Samsung

74th Republic Day Celebration

NIT Raipur celebrated India's 74th republic day on 26th Jan. 2023 in the presence of **Dr. (Mrs.) A. B. Soni**, *Director (I/C), NIT Raipur*, **Dr. Shrish Verma**, *Dean (Academics)* and **Dr. P. Y. Dhekne**, *Registrar (Officiating)*. The event started with flag hoisting by honourable **Dr. (Mrs.) A. B. Soni,** followed by the national anthem and a parade by NCC cadets. Cultural program staged a patriotic message by an NCC Cadet, patriotic songs by **Team Raaga**, dance performances by **Team Nrityam**, a documentary, and poetries. **Dr. (Mrs.) A. B. Soni** addressed the attendees about the accomplishments such as **65th Rank** in **NIRF** rankings, felicitation with **Shiksha Samman** by *the Honourable Governor of Chhattisgarh*, recognition as **District Green Champion** of Raipur by *Mahatma Gandhi National Council of Rural Education, Ministry of Education.* She stated that NIT Raipur also celebrated **Azadi ka Amrit Mahotsav** and **Har Ghar Tiranga** by organizing Prabhat Pheries (a series of events spreading awareness about 75 years of India's independence). She shared that NIT Raipur had organized a Unity Run to celebrate **Unity Day** and participated in All-India Inter-NIT Faculty and Staff Sports Meet. She concluded her speech and requested everyone to extend their support and efforts to achieve great goals.

Guest Lecture on India @75: Videsh Niti

NIT Raipur organized a guest lecture under the lecture series entitled **India@75: Videsh Niti** on 12th Jan. 2023. The lecture series was organized by the **Ministry of External Affairs** in order to celebrate **Azadi ka Amrit Mahotsav**, facilitating distinguished guest lectures in multiple gazetted institutes by senior diplomats on international affairs. The Chief Guests for the lecture was **Dr. Jitendra Nath Mishra**, *Retd. Indian Ambassador and Diplomat*. **Mrs. Ratan Prabha Mishra,** and **Dr. (Mrs.) A. B. Soni**, *Director (I/C)*, *NIT Raipur.* **Dr. P. Y. Dhekne**, *Registrar (Officiating)*, **Dr. Sudhakar Pandey**, *Associate Professor, IT*, and **Dr. S. L. Sinha**, *Professor, ME*, were also present throughout the event. The event was inaugurated by presenting a sapling to all the chief guests as a welcoming token and presenting a documentary on NIT Raipur, highlighting the institute's achievements to the present guests, professors, and students. **Dr. P. Y. Dhekne** initiated the event, giving a brief introduction of the chief guest speaker, **Dr. Mishra**, and gave an insight into his service as a former Indian Ambassador and Diplomat, to the audience. He expressed his gratitude to the Director of NIT Raipur and other staff members for giving him an opportunity to deliver this lecture and praised the excellent hospitality service he received while being in NIT Raipur.

Archifest'23 by Department of Architecture

Department of Architecture (DoA), NIT Raipur organized the annual college Architecture fest, **Archifest' 23** on 18th and 19th Feb. 2023. The 2-day fest was conducted under the guidance of **Dr. Swasti Sthapak**, *HoD, DoA*.

Dr. Debashis Sanyal, *Dean (Faculty Welfare)* headed the inaugural ceremony, and had graced the occasion through lamp lighting and Saraswati Pooja. Other faculty members and students of the Architecture department were also present throughout the event. The event witnessed a lot of competitions and games. Some of the highlights of day 1 were "**Jugaad**", On-Spot events, quiz competition, Film making workshop, "**Vogue**" (tips and tricks to sell design) and a series of captivating cultural events.

Day-2 observed events like Debate Competition, Sculpture making, Treasure Hunt, Story making (Comic sketch), On-Spot events, dance, Anand Mela, and prize distribution. The 2-day fest was a memorable and enthralling experience for all the participants and attendees. The numerous opportunities, student-led exhibitions, seminars, guest lectures, and meet-ups with like-minded people enabled a chance for all to investigate deeply the newest architectural ideas.

MoU

NIT Raipur and CPRI Bangalore

NIT Raipur and **CPRI Bangalore** signed an MoU on 13th Jan. 2023, for the execution of the CPRI Sponsored Research Scheme on Power (RSOP) project for R&D in the Indian Power sector titled **Design and Development of Artificial Intelligence Based Short Term Load Forecasting Model. Dr. Prabhat Diwan**, *Dean (R&C)* and **Dr. M. Venkateswara Rao**, *Additional Director & HoD, R&D Management Division*, *CPRI* signed the documents. **Dr. Anamika Yadav**, *HoD*, *EE* and **Dr. S. Ganesh Kumar**, *Chief Administrative Officer*, *CPRI* were present on the occasion.

Cadets of NIT Raipur Selected for NCC Camp

NIT Raipur's 4 cadets were chosen for a **National NCC Camp** that was organised under the **EK BHARAT SHRESHT BHARAT (EBSB-1)**, held at **Kollam**, **Kerala** between 24th Dec. 2022 to 2nd Jan. 2023, out of which 3 were **SD** (male cadets), which included **Sergeant Satyam Singh**, *6th sem.*, *CSE*, **Sergeant Bidari Mahesh Babu**, *6th sem.*, *DME*, and **Aditya Tiwari**, *Senior Underofficer*, *8th sem.*, *MME*, and 1 **SW** (female cadet), **Deepshikha Sharma**, *Junior Underofficer*, *6th sem.*, *ECE*. 150 cadets were selected from **MP** & **CG** to represent their directorate, out of which 4 were from **NIT Raipur**. All cadets participated in various activities and were felicitated based on their performance. The selection of the cadets was based on their record, performance in NCC like attendance, work and contribution, after which the shortlisted cadets were also screened by **Colonel Rakesh Budhani**, *CO (Commanding Officer)* via basic interaction to judge the personality of the cadets. There were 4 vacancies for **5 CG CT I COY** which comprised cadets of **NIT Raipur**, **Science college** and **IGKV**, of which, the cadets of **NIT Raipur** occupied all the vacancies.

At Kerala camp, more than 600 cadets had participated, who took part in various activities like anchoring, group song, group dance, debate, NIAP presentation in front of **ADG**, *NCC*, *Kerala and Lakshadweep Directorate*. During the camp, **NIT Raipur** cadets performed all the duties of a camp senior. All the NCC cadets will appear for their C certificate examination to achieve a C certificate and are planning to join the Indian Army after completion of their B. Tech degrees.

Women's Day Celebration

NIT Raipur celebrated **Women's day** on 6th Mar. 2023. The event was coordinated under the guidance of **Dr. Mridu Sahu**, *Assistant Professor*, *IT*, **Dr. Ebha Koley**, *Associate Professor*, *EE* and **Ms. Shailoneil Sahu**, *Assistant Professor*, *DoA*. **Dr. Swasti Sthapak**, *HoD*, *DoA*, **Dr. Shubhrata Gupta**, *Professor*, *EE*, and **Dr. S. L. Sinha**, *Professor*, *ME* were the guests of honour. The event began with the lamp lighting by the Guests of Honour, followed by the National Anthem. **Dr. Swasti Sthapak** talked about how women are capable of doing everything that men do, but there are some tasks which nature has assigned only to women which makes them great. Similarly, **Dr. S. L. Sinha** and **Dr. Shubhrata Gupta** discoursed about the importance of women's day and the contributions of women in the society. **Dr. Mridu Sahu** discussed the purpose of the event and the various fun activities which would happen throughout the program. She also talked about **Aashirwaad**, a women's group of the institute's female faculty members which comprises 43 people. The main aim of **Aashirwaad** is to work for the various social causes of the society. With a little contribution from the members of the group, a documentary was presented about the inspirational women of our country. Various cultural performances were conducted including singing and dancing, along with a couple of fun events by the faculties and their family members. The audience took active participation. Gifts were also presented to the winners of the fun games.

Several other events were organized under the **Celebration of Women's Day** such as a **Talent Hunt Competition**, in which the women faculties and workers presented poetries, songs, mono acts, storytelling and much more. The performers were awarded with gifts and saplings. A woman counselling session was also conducted by **Dr. Heena Chawda**, *Temporary Faculty*, *DHSS*. She addressed the audience about how mental health is as important as physical well-being of a human and talked about the different perspectives of looking into various situations. The female faculties of the institute were honoured with mementos as a token of respect for their immense contribution towards the institute. The women workers of the institute were also presented with gifts as a token of appreciation for their work. The event was successfully concluded with a vote of thanks by **Dr. Ebha Koley**.

NIT Raipur Stood First at All India Inter-NIT Sports Meet

NIT Raipur stood first in the **All-India Inter-NIT Sports Meet** in **Yoga Competition**, which was held at **NIT Suratkal** from 20th to 22nd Jan. 2023. The male team of **NIT Raipur** secured the first position and achieved the gold medal, while the female team secured the second position in the female category and won the silver medal. **Sudhanshu Patel**, *4th sem*, *MME* won the title of **Best Player of Yoga**.

Teams from 15 NITs across the country had participated in this competition. Along with the yoga competitions, various other games were also organized during this period. **NIT Raipur's** volleyball team also performed brilliantly during this period and won everyone's applause. During this event, **Ms. Sandhya Mahadik**, *Sports Instructor*, *Department of Sports* and **Mr. Suraj Nishad**, *Teaching Assistant*, *DHSS*, were present with the team as team managers and provided proper guidance to the players.

Organized Demonstration of Shake Table Model

Department of Civil Engineering, **NIT Raipur** organized a demonstration of **Seismic Simulator (Shake Table) Model** for the employees of **Bihar State Disaster Management Authority (BSDMA)** on 23rd and 24th Jan. 2023. The model was demonstrated by **Dr. Govardhan Bhatt**, *Assistant Professor*, *Civil Engineering*, along with **Sagar Chowdhury** and **Ajay Satre**, *M. Tech*, *Civil Engineering* with the purpose of training the masons of Bihar to construct reinforced buildings and test their stability in the event of an earthquake. The model simulates the behavior and movements of ground that occur during an actual earthquake and would significantly benefit in constructing buildings that can withstand damage from seismic activity. **Dr. Uday Kant Misra**, *Vice Chairman, BSDMA*, was also present at the demonstration and appreciated the model.

Live Screening of Pariksha Pe Charcha 2023

NIT Raipur conducted the live screening of **Pariksha Pe Charcha 2023** with **Hon'ble PM Shri Narendra Modi** on 27th Jan. 2023. This deliberation helped the students, teachers, and parents, across the nation, get a grip on the stress caused by tests and exams.

Inauguration of Vachan Milk Parlour

Dr. (Mrs.) A. B. Soni, *Director (I/C)*, *NIT Raipur* and **Dr. P. Y. Dhekne**, *Registrar (Officiating)* inaugurated the **Vachan Milk Parlour** on 5th Jan. 2023 at NIT Raipur. **Dr. Shrish Verma**, *Dean (Academics)*, **Dr. Samir Bajpai**, *Head*, *Career Development Centre*, Associate Deans (Academics), Associate Dean (Student Welfare), **Mr. Venkat Ram**, *Director*, *Vachan Group*, various HoDs, Assistant Registrars, faculties and students were present at the inauguration.

Academic Activities

STTP/Conference/Workshop Conducted

Course on Microbial Electrochemical Systems as a Platform Technology and its Emerging Applications

Department of Biotechnology, NIT Raipur organized a one-week online course on **Microbial Electrochemical Systems as a Platform Technology and its Emerging Applications** under the **MHRD s**cheme on Global Initiative of Academic Networks (GIAN) from 16th to 20th Jan. 2023. The course was coordinated under the supervision of **Dr. Pratima Gupta**, *Associate Professor*, *DBT*, and **Dr. Dijendra Nath Roy**, *Assistant Professor*, *DBT*. **Dr. Abraham Esteve Núñez**, *Principal* Investigator, Bioe *Group* was present as Foreign Faculty. **Dr. D. N. Roy** concluded the online course by addressing a valedictory speech. He appreciated the support and encouragement of **Dr. (Mrs.) A. B. Soni**, *Director (I/C)*,

NIT Raipur, **Dr. Prabhat Diwan**, *Dean*, *(R & C)*, **Dr. Manoj Kumar Chopkar**, *Institute Coordinator, GIAN Program* and **Dr. Lata Upadhyaya**, *HoD, DBT* throughout the program. A total of 10 lectures and 5 tutorials covering various topics in microbial electrochemical systems (MESs) were conducted in the one-week course with the active participation of up to 50 candidates. The course aimed to help participants understand the concept of bio-catalytic activity inside the MESs.

International Conference on Biomedical Engineering Science and Technology (ICBEST 2023)

Department of Biomedical Engineering, **NIT Raipur** organized a two-day international conference on **Biomedical Engineering Science and Technology: Roadway from Laboratory to Market (ICBEST 2023)** on 10th and 11th Feb. 2023. **Dr. (Mrs.) A. B. Soni**, *Director (I/C)*, *NIT Raipur* was the Chief Patron. The conference was inaugurated by **Dr. Prabhat Diwan**, *Dean (R&C)*, as the Patron, **Padma Shri Dr. Arun T. Dabke**, *Retd. Dean & Professor*, *Paediatric*, *Medical College Raipur*, *Former VC Ayush Health Science Raipur*, as the Chief Guest, and **Dr. Bikesh Kumar Singh**, as the Chairman of the conference. **Dr. Saurabh Gupta**, *Assistant Professor*, *BME*, **Dr. Nishant Kumar Singh,** *Assistant Professor*, *BME*, and **Dr. M. Marieswaran**, *Assistant Professor*, *BME* were the organizing secretaries. The aim of the event was to provide a forum for academicians to share their researched materials.

On day one, **Dr. Guoan Zheng**, *Associate Professor*, *Department of Biomedical/Electrical Engineering*, *University of Connecticut*, *USA*, was the Keynote Speaker. He discussed about the Coded Ptychography using Blu-ray and his research on handheld ptychographic whole slide scanner, in-*vitro* monitoring with high spatiotemporal resolution. **Dr. B. K. Singh**, **Dr. A. T. Dabke**, and **Dr. P. Diwan** addressed the crowd about the conference, the role and reach of technology of medical science in the rural areas, and the growth in the biomedical engineering field with time respectively. On day two, **Dr. Narendra Kuber Bodhey**, *Professor*, *Department of Radio Diagnosis*, *AIIMS Raipur* was the Chief Guest. **Dr. B. K. Singh** summarised the two-day conference in the presence of **Dr. Rakesh Kumar Tripathi**, *HoD*, *Information Technology*, **Dr. T. P. Sahu**, *Assistant Professor*, *Information Technology,* and members of the organizing committee. The best research papers of **Mr. N. P. Guhan Seshadri**, **Dr. Lipismita Panigrahi**, **Mr. Anway S. Pimpalkar**, **Ms. Katinder Kaur**, **Dr. Pushpa Giri**, and **Mrs. Vandana Nilesh Pagar** were selected to be published in Scopus indexed Springer book series as book chapters. With more than 80 attendees, 35 technical presentations were scheduled. The conference concluded with the vote of thanks by **Dr. Nishant K. Singh**.

ATAL FDP on 'Agri-Food Supply Chain Management'

Department of Mechanical Engineering, **NIT Raipur** organized a 2-week ATAL Faculty Development Program (FDP) on *Agri-Food Supply Chain Management* under the **P.M. Gati Shakti** from 20th Feb. to 3rd Mar. 2023. **Dr. (Mrs.) A. B. Soni**, *Director (I/C)*, *NIT Raipur* was the Chief Patron. **Dr. Prabhat Diwan**, *Dean (R&C)* was the Patron and **Dr. S. Sanyal**, *HoD*, *ME* was the Chairperson of the FDP. The Program was coordinated by **Dr. A. R. Singh**, *Assistant Professor*, and **Dr. V. K. Gaba**, *Associate Professor*, *ME*. The first phase of the program was organized virtually from 20th to 25th Feb. 2023 and in offline mode from 27th Feb. to 3rd Mar. 2023. The inaugural opening addresses were delivered by **Dr. S. Sanyal** and **Dr. Balkrishna Eknath Narkhede**, *Professor*, *NITIE Mumbai*. The course aimed at providing a forum for understanding the cross-functional perspective of the Agri-food Supply chain. **Dr. (Mrs.) A. B. Soni**, in her address stressed on the need for supply chain management in Agri-Food while **Dr. P. Diwan** and **Dr. S. Sanyal** enlightened the audience about the topic as the need of the hour. They reminded the participants about everyone's responsibility towards nurturing the environment by adopting supply chain management which helps in reducing the losses occurred during the transportation of agro products. **Professor Narkhede** gave a clear opinion about enabling technologies for sustainable agri-food supply chain Management.

The lectures were delivered by leading experts from the institutes of international recognition like IIMs, IITs, **NITIE Mumbai** and NITs. Around 50 participants comprising students, faculty, and industry personnel from all over India had taken part in this 14-day FDP.

STTP on Enhancing Personality & Employability amongst Youth

Department of Humanities and Social Sciences, **NIT Raipur** inaugurated a five-day **Short Term Training Program (STTP)**

on **Enhancing Personality & Employability amongst Youth** on 24th Feb. 2023. **Dr. (Mrs.) A. B. Soni**, *Director (I/C)*, *NIT Raipur* was the Chief Patron of the program. The program had **Dr. Prabhat Diwan**, *Dean (R&C)* as the Chief Guest, **Dr. Subhojit Ghosh**, *Professor In-charge & Head*, *Continuing Education Cell* as the Guest of Honour and **Dr. Jaya Dwivedi**, *Head of Department*, *DHSS* as the Chairperson for the program. It was sponsored by **Rajiv Gandhi National Institute of Youth Development**, *Ministry of Youth Affairs and Sports, Government of India* and supervised by **Dr. Sandip Sarkar**, *Assistant Professor*, *DHSS*, **Dr. Shashikanta Tarai**, *Assistant Professor*, *DHSS,* and the committee members. **Dr. Anoop K. Tiwari**, *Associate Professor*, *DHSS* discoursed upon the ambition of the STTP. **Dr. P. Diwan** enlightened on personality development taking Swami Vivekananda as example. **Dr. Subhojit Ghosh** focused more on the importance of soft skills as well as technical skills. The vote of thanks of inaugural session was delivered by **Dr. Chetna Rajput**, *Assistant Professor*, DHSS in the presence of **Dr. Moksha Singh**, *Assistant Professor*, *DHSS* and **Dr. Vijaya Babu**, *Assistant Professor*, *DHSS*. The STTP concluded on 28th Feb. 2023 with the certificates issued for the participants.

Organized STTP on Quantum Computing and its Applications

Department of Information Technology, **NIT Raipur** organized a five-day Short Term Training Program (STTP) on **Quantum Computing and its Applications: Modern Approaches and Practices** from 27th Feb. to 3rd Mar. 2023. **Dr. (Mrs.) A. B. Soni**, *Director (I/C)*, *NIT Raipur* was the Chief Patron of the program. **Dr. Prabhat Diwan**, *Dean (R&C)* was the Patron. **Dr. Rakesh Tripathi**, *HoD*, *IT* was the Chairperson for the same. The program was coordinated under the supervision of **Dr. Rakesh Tripathi** and **Dr. Chandrashekar Jatoth**, *Assistant Professor*, *IT*. The aim of this STTP was to provide upgradation of knowledge and skills to the attendees and provide in-depth exposure to them.

Day-1 of the STTP began with an inaugural session. **Dr. Buddha Chandrasekhar**, *Chief Coordinating Officer*, *AICTE*, *Ministry of Education*, *Govt.of India* was the Chief Guest and Speaker for the session. **Dr. Vignesh Sivaraman**, *Assistant Professor*, *CSE*, *IIT BHU*, **Dr. Sudeep Satheesan**, *Associate Vice President-Technology*, *First Source Solutions Limited*, *Hyderabad*, **Dr. Suvendu Rup**, *Associate Professor*, *IT*, *NIT Raipur*, **Prof. Vimal Bhatia**, *Professor*, *EE*, *IIT Indore*, **Dr. Rakesh Tripathi**, *HoD*, *IT*, *NIT Raipur*, **Dr. Adam Glos**, *Assistant Professor*, *Quantum Systems of Informatics Group*, *Poland*, **Prof. Prasanta K. Panigrahi**, *Director*, *IISER Kolkata*, **Prof. R. K. Shyamasundar**, *JC Bose National Fellow & Distinguished Professor*, *CSE*, *IIT Bombay* and **Prof. Virendra Singh**, *Professor*, *EE & CSE*, *IIT Bombay* addressed the attendees in the STTP. Crucial topics such as **A Modern Journey of Quantum Mechanics to Quantum Computing**, **Quantum Information and Applications**, **Quantum Computer and Quantum Algorithms**, **Quantum Secure Cryptography**, **IBM Qiskit**, **UI Tools and Open Quantum Assembly Language**, **Quantum Programming Languages**, **Platforms and Frameworks**, **Quantum Search**, **Quantum Subroutines**, **Grover's Algorithm**, **Quantum Fourier Transforms**, **Discrete Logarithms**, **Shor's Algorithm**, **BB84**, **Quantum Cryptography & Key Distribution**, **Quantum Machine Learning**, **Opportunities & Applications and Quantum and Blockchain Applications** were covered and expatiated upon in this STTP.

The STTP was open to participants diversifying from students, research scholars and faculties of engineering and basic sciences of educational institutes, and employees of industries and it concluded on 3rd Mar. 2023 with distribution of certificates to the attendees.

Expert Lectures Delivered by Faculty/Staff

- **Dr. Anamika Yadav**, *HoD*, *EE* delivered an invited lecture on *Neural Network and Case Studies in AI and ML* at **E and ICT FDP on Artificial Intelligence Applications for Engineers**, organized by **NIT Warangal** and **Digital and Telecom Department, SIDTM Pune** from 23rd Jan. to 1st Feb. 2023, on 25th Jan. 2023.

Research Frontier

Awards, Recognition, and Fellowships

- **Dr. Shubhrata Gupta**, *Professor*, *EE* has been appointed as **Member** of **Chhattisgarh State Electricity Regulatory Commission, Raipur.**
- **Dr. Swasti Sthapak**, *HoD*, *DoA* has been **nominated** as a member in the **Editorial Board** of **Springer Journal Environment, Development and Sustainability**.

Patents

- **Dr. Suraj Kumar Mukti**, *Associate Professor*, *ME*, and **Dr. Animesh Agrawal**, *Research Associate*, *ME* have been granted a design patent titled **Smart Luggage with Person Carrier** by the Patent Office, Government of India on 9th Jan. 2023.
- **Dr. Suraj Kumar Mukti**, *Associate Professor*, *ME*, **Dr. Animesh Agrawal**, *Research Associate*, *ME*, **Swatantra Kumar Jaiswal**, *Ph.D. Scholar*, *ME,* **Vimal Deshmukh**, *Ph.D.* Scholar, *ME,* **Roshan Lal Tamrakar**, *Ph.D. Scholar, ME,* **Dileshwar Sahu,** *Ph.D. Scholar, ME* have been granted a design patent titled **Knowledge Management-Based Robotic System** by the Patent Office, Government of India on 13th Jan. 2023.
- **Dr. Suraj Kumar Mukti,** *Associate Professor, ME,* **Dr. Animesh Agrawal,** *Research Associate, ME,* **Mr. Dileshwar Sahu,** *Ph.D. Scholar, ME,* **Mr. Swatantra Kumar Jaiswal,** *Ph.D. Scholar, ME* have been granted a design patent titled **Solar Powered Sunshade Curtain for Cars** by the Patent Office, Government of India on 13th Jan. 2023.
- **Dr. Narendra D. Londhe**, *Associate Professor*, *EE*, **Ishan Bhardwaj**, *Ph.D. Scholar*, **Sunil Kumar Kopparapu**, *Speech and Natural Language TCS Innovation Labs Mumbai* have been granted a utility patent on **Systems And Methods For Generation And Matching Of Biometric Templates** by the Patent Office, Government of India on 15 Feb. 2023 for a term of 20 years from 2nd Sep. 2014.

Sponsored Research Projects

- The project titled *Detailed Analytical and Computational Studies of Waiting Time Distribution in Various Queueing Systems* by **Dr. Sujit Kumar Samanta**, *PI* has been sanctioned by the **Science & Engineering Research Board (SERB)**, **Department of Science and Technology**, **Government of India**, **Grant** Rs. 6,60,000/- for a period of 36 months.
- The project titled *Design and Development of Artificial Intelligence based Short Term Load Forecasting Model* by **Dr. Anamika Yadav**, *PI*, and **Dr. Shubhrata Gupta**, *CO-PI* has been sanctioned by the **Central Power Research Institute (CPRI)**, **Bangalore**, **Grant** Rs. 20,54,000/- for a period of 24 months.

PhD Thesis Defended

- **Mr. Indranil Sarkar** defended his Ph.D. thesis entitled *Efficient Task Placement and Computational Offloading Strategy for Fog-Cloud Computing Networks* on 9th Dec. 2022 under the supervision of **Dr. Sanjay Kumar**, *Associate Professor*, *IT*.
- **Mr. Ankit Agrawal** defended his Ph.D. thesis entitled *Development of Approaches for Mitigating Challenges in Named Entity Recognition* on 15th Dec. 2022 under the supervision of **Dr. Manu Vardhan**, *Assistant Professor*, *CSE* and **Dr. Sarsij Tripathi**, *Assistant Professor*, *CSE*, *MNIT Allahabad*.
- **Mr. Anindya Kumar Biswas** defended his Ph.D. thesis entitled *Design of Security Techniques for Secret Sharing, Blockchain and Routing in MANETs* on 16th Dec. 2022 under the supervision of **Dr. Mou Dasgupta**, *Associate Professor*, *MCA*.
- **Ms. Namrata Gupta** defended her Ph.D. thesis entitled *Design and Analysis of Asymmetric Superjunction Insulated Gate Bipolar Transistor: Limitations and Solutions* on 16th Dec. 2022 under the supervision of **Dr. Alok Naugarhiya**, *Assistant Professor*, *ECE*.
- **Mr. Pratap Ram** defended his Ph.D. thesis entitled *Landslide Hazard, Risk, and Vulnerability Assessment Of the Mussoorie and Nainital Township, Northwest Himalaya* on 27th Dec. 2022 under the supervision of **Dr. N. Vishwakarma**, *HoD*, *DAG* and **Dr. Vikram Gupta**, *Scientist*, *Wadia Institute of Himalayan Geology*.
- **Ms. Anju** defended her Ph.D. thesis entitled *Design and Investigation of Nanotube Tunnel Field Effect Transistor for Biosensing Applications* on 18th Jan. 2023 under the supervision of **Dr. Guru Prasad Subas Chandra Mishra**, *Associate Professor*, *ECE* and **Dr. B. Acharya**, *Associatet Professor*, *ECE*.
- **Ms. Nirlipta Mallick** defended her Ph.D. thesis entitled *Starch/PVA Biocomposite Film for Food Packaging Applications* on 18th Jan. 2023 under the supervision of **Dr. Dharm Pal**, *Associate Professor*, *DCE*, and **Dr. (Mrs.) A.B. Soni**, *Director (I/C)*, *NIT Raipur & Professor*, *DCE*.
- **Ms. Manisha Yadav** defended her Ph.D. thesis entitled *Structural Characterization of Target protein by Molecular Dynamics Simulations and Pharmacophore Mapping, Virtual Screening for the identification of high affinity anticancer lipopeptides* on 19th Jan. 2023 under the supervision of **Dr. Satya Eswari**, *Assistant Professor, DBT*.
- **Ms. Khobragade Pallavi Pradeep** defended her Ph.D. thesis entitled *Aerosol Characterization and Estimation of Radiative Forcing over an Urban Industrial Area* on 20th Jan. 2023 under the supervision of **Dr. A. V. Ahirwar**, *Associate Professor*, *CE*.
- **Mr. Sagar Dattatray Turkane** defended his Ph.D. thesis entitled *Geotechnical Characterization of Soils Blended with Fly Ash* on 27th Jan. 2023 under the supervision of **Dr. Sandeep Kumar Chouksey**, *Assistant Professor, CE*.
- **Mr. Ritesh Jain** defended his Ph.D. thesis entitled *Productivity Improvement by Frugal Approach in Manufacturing Industry* on 1st Feb. 2023 under the supervision of **Dr. A. M. Rawani**, *Professor*, *ME*.
- **Mr. Ashish Semwal** defended his Ph.D. thesis entitled *Machine based Behavioural Multiparametric Pain Assessment System* on 2nd Feb. 2023 under the supervision of **Dr. Narendra D. Londhe**, *Associate Professor, EE*.
- **Mr. Pulkit Singh** defended his Ph.D. thesis *entitled Development of Efficient VLSI Architectures for Lightweight Cryptographic Algorithms* on 16th Feb. 2023 under the supervision of **Dr. B. Acharya,** *Associate Professor*, *ECE*, and **Dr. R. K. Chaurasiya**, *Assistant Professor*, *ECE*, MANIT *Bhopal*.
- **Mr. Dhruva Mukhopadhyay** defended his Ph.D. thesis entitled *Study of Microbial Electrochemical System for the Production of Hydrogen Peroxide and its Subsequent Application in Lignin Valorization* on 23rd Feb. 2023 under the supervision of **Dr. Pratima Gupta**, *Associate Professor, DBT*.

Students' Corner

- **NIT Raipur's Anmol Rao** and **Anamika Tiwari**, *8th sem*, *B.Arch*, under the guidance of **Dr. Swasti Sthapak**, *HoD, DoA* earned **Special Mention** in **Saint Gobain Transparence 17.0 Finale** at **REVA University Campus**, **Bengaluru**. **Transparance** is an Architectural Design Competition for aspiring architects and designers.
- **NIT Raipur's Ms. Aysha Parveen**, *Research Scholar*, *DoM* received the **Best Paper Award** for her Research Project titled *Performance Analysis of Batch Arrival Bulk Service Queue with Server Vacation*, under the supervision of **Dr. Sujit Kumar Samanta**, *Associate Professor*, *DoM* in an international conference, **Optimization**, **Learning and Analytics in Business (OLAB-2022)**, organised by the **Department of Mathematics**, **Heritage Institute of Technology**, **Kolkata**, and **Operational Research Society of India**, held from 15th to 17th Dec. 2022.
- **NIT Raipur's Kukil Sharma**, **Aditya Dewanjee**, **Khushboo Sharma**, *8th sem*, *B. Arch* led by **Anmol Rao**, *8th sem*, *B. Arch* and **Pragya Dole**, **Osheen Arshee**, **Sinni Banjare,** *8th sem*, *B. Arch* led by **Varsha Daharia**, *8th sem*, *B.Arch* qualified for the final round being in the top 4 teams in the Eastern Region in **INSDAG – Architecture Award Competition**, **2022**.
- **NIT Raipur's Rutvik Deshpande**, *6th sem*, *B. Arch* was awarded with the **Young CAADRIA Award** by **The Association for Computer Aided Architectural Design Research in Asia (CAADRIA)**. The award is presented only to one awardee from one institution.

GATE 2023

Students of **NIT Raipur** have once again proven their worth by giving a commendable performance in the **Graduate Aptitude Test in Engineering (GATE) 2023**, the results of which were released on 16th Mar. 2023 by the **Indian Institute of Technology, Kanpur**. The students at the Institute brought laurels by securing good ranks in GATE 2023. **NIT Raipur** congratulates them and wishes them success in the future.

Student	AIR	Student	AIR	Student	AIR	Student	AIR
Priyanshu Gupta (BME)	**6**	Yogesh Lalchandani (DME)	**9**	Shailesh Kumar Tyagi (DME)	**20**	Harsh Deep Rai (DME)	**29**
Mohit Prasad (DME)	**29**	Reman Kumar Patel (DME)	**40**	Vinay Yadav (DME)	**44**	Sankalp Shukla (DME)	**50**
Lumesh Dewangan (MME)	**54**	Aniket Kumar Gupta (DME)	**57**	Anjali Dewangan (MME)	**63**	Sudhanshu Kawadkar (DME)	**71**
Muskan Tripathi (DME)	**81**	Aman Kumar Churendra (DME)	**91**	Shikhar Chandrakar (DME)	**95**	Harsh Kumar Choudary (IT)	**250**
Aditi Sahu (DoA)	**290**	Pritam Roy (DoA)	**379**	Abhishek Kumar (ECE)	**470**		

Club/Committee Activities

Inauguration of Road Safety Week by Abhinay

Abhinay- The Dramatics Club, **NIT Raipur** organised the inaugural ceremony of the **Traffic Safety Awareness Week** by Raipur Police on 17th Jan. 2023. The program was organised under the guidance of **Dr. Govardhan Bhatt**, *Faculty In-Charge*, *Abhinay*. **Shruti Singh**, *TI*, *Raipur Police*, **Umashankar Verma**, *ASI*, *Saraswati Thana*, **T. L. Bhoi**, *ASI*, *Traffic Police Department*, **Gurjeet Singh**, *DSP*, *Traffic Police Department*, **Dinesh Tak Saksharta**, *Literacy Vibhag* and **Sandeep Duppad** from a renowned NGO of Raipur were the guests of honor.

T. L. Bhoi, *ASI, Traffic Police Department* began the event by briefing about traffic safety. He urged everyone to sincerely follow traffic rules and drive slowly and carefully. Following this, **Abhinay- The Dramatics Club** staged a play to create awareness about traffic rules. The event concluded with a closing speech by **Dr. Govardhan Bhatt**.

Annual Photography Workshop by Click Club

Click Club, NIT Raipur organized an **Annual Photography Workshop** on 21st and 22nd Jan. 2023, under the guidance of **Dr. Shubhashis Sanyal**, *Professor In-charge*, *Click Club*. **Mr. Gokul Soni**, *Senior Photographer*, *Navabharat*, *the Chief Guest,* inaugurated the workshop, followed by premiering of the after-movie of SHRUTI, the institute's annual music fest, on day one. **Mr. Kunal Gupta**, *Fashion & Advertising Photography*, *the Guest Speaker*, emphasized various photographic techniques along with commercial photography on day two. The workshop concluded with the speech of **Dr. S. Sanyal,** followed by a photo editing session. **Mr. Giriraj Gupta** *(Chem/1975)* was also present. The workshop was successful with the presence of more than 200 participants.

Day with Data Science by E-Cell

Entrepreneurship-Cell (E-Cell), **NIT Raipur**, organised a session on **Day with Data Science** on 14th Feb. 2023, under the guidance of **Dr. Chandrakant Thakur**, *Faculty In-charge*, *E-Cell*. **Sameer Ranjan**, *Entrepreneur, and Innovator*; *the Chief Technology Officer and Director (Data Science)*, *Catenate Corp*; *the Board Chairman, S3 Private Limited*; *Alumnus*, *NIT Raipur*, was the speaker. He has many AI algorithms' patents and a micro-Venture Capital Fund under his name. He talked about **Data Science** and it's real-life applications like machine learning, data-driven algorithms, etc. and motivated students to execute their solutions for real-life problems along with giving insights on barriers in the entrepreneurship. The interactive session was concluded with a sapling gifted to the speaker.

Finance and Consulting Club Activities

Webinar on Consulting

Finance and Consulting Club, **NIT Raipur** organized a webinar on **Consulting 101: Discussing Management Consulting and Beyond** on 14th Jan. 2023. **Mr. Peeyush Jain**, *Head*, *Strategy Division*, *Tata NEU* and **Mr. Mohit Garg**, *Co-founder*, *Mazink* were the main speakers of this session.

The session mainly dealt with various insights into an engineer's way of solving problems, which includes breaking down problems into chunks, finding out resources, structuring the problem and self-inquiry, managing pressure of stressful work, approaches to building a framework, synthesizing data for finding solutions, etc. The speakers motivated the students and taught them the importance of time management and consistency. They also shared the necessary requirements in order to crack good colleges through CAT examination after completion of engineering.

'Mudra 2023'

The Finance and Consulting Club (FCC), **NIT Raipur** organised **Mudra** on 26th Feb. 2023, under the supervision of **Dr. Anoop Tiwari**, *Faculty In-charge*, *FCC*. In the first event, **Fin-Ace 2.0**, a business and monetary policy themed quiz, six teams proceeded to the final round out of fifty teams from the preliminary round resulting in **Team Astra** as the winners and **Team Pikachu** as runners-up. **Dr. Anoop Tiwari** addressed the audience about several principles required to form a business-oriented mindset. In the second event, **Equity Edge**, an equity research competition, teams had to present their findings on the performance and prospects of different companies covering various aspects like product strategy, pricing, sector analysis, etc. The winners were **Team Liquidity** followed by **Team Brainzers**, **Team FinPlan** and **Team Marwadis**. The event was successfully concluded with prize distribution and audience interaction.

Innovation Cell Activities

Ideathon by I-Cell

Innovation Cell's (I-Cell) Makerspace, NIT Raipur organized the final round of **Ideathon** on 22nd Jan. 2023, under the guidance of **Dr. Saurabh Gupta**, *Faculty In-Charge*, *I-Cell*. The students presented their ideas in teams to the problem

statements tackling real-life challenges. Eleven teams were shortlisted throughout India for the final round. Judges for the final round of the Ideathon were **Dr. Subhas Ganguly**, *Associate Professor*, *Metallurgical & Materials Engineering* and **Dr. Himanshu Govil**, *Assistant Professor*, *Applied Geology,* and they also talked on **How innovations in emerging technologies will shape the future of humanity?** The event concluded successfully with **Team Matrix**, **Team Clairvoyant** and **Abhishek Mallik** securing **1st**, **2nd** and **3rd** place respectively.

I-talk on Intellectual Property Rights by I-Cell

Innovation Cell (I-Cell), **NIT Raipur** organized an I-talk on **Intellectual Property Rights (I.P.R.) and Its Relevance for Faculties & Students of Institutes/Startups** on 2nd Feb. 2023, under the guidance of **Dr. Saurabh Gupta**, *Faculty In-charge*, *I-Cell*.

Mr. Meghdut Bhattacharya, *I.P.R. Attorney*, *Startup Advocate* was the guest speaker. He opened the event by encouraging the students to propose business ideas and explained how innovations can be protected through I.P.R. He compared I.P.R. to moats and talked about its importance in start-ups, and stated that business concepts cannot be protected but the business processes can be secured through I.P.R. The event concluded with the active participation of over 50 attendees gaining knowledge over the course of the session through interaction.

The Techonomic Quotient 10.0 by Interact

Interact Club, **NIT Raipur** in association with **Technocracy-The Technical Committee of NIT Raipur** organized the **Techonomic Quotient 10.0** on 5th Feb. 2023 during Aavartan 2k23, marking the ten-year anniversary of the club. The event consisted of two rounds. More than 100 team participated in the subjective based first round, out of which six teams made it to the finale. The quiz was based on technology, business, and general knowledge. **Kunal Dhurwey**, *8th sem*, *CSE* and **Sachin Malve**, *8th sem*, *BME* secured the **1st** place. **H. Anshul**, *6th sem*, *ME* and **Aayush Bariar**, *6th sem*, *ME* secured **2nd**, while **Nomesh Patel**, *4th sem*, *ECE* and **Jaideep Biswas**, *4th sem*, *ECE* were **3rd** respectively.

Indian Heritage Extempore by Literati

Literati-The Literary Committee of NIT Raipur organized an **Indian Heritage Extempore** as a part of 74th Republic Day celebrations on 21st Jan.2023. The event was organized under the supervision of **Dr. Sanjay Kumar**, *Professor In-charge*, *Literati*. The event was judged by **Dr. Anoop Kumar Tiwari**, *Associate Professor*, *DHSS*. Candidates were judged on the parameters of their content, clarity of thought, effective use of the English language, logical organization, presentation skills and their enthusiasm. People from the audience were allowed to interject the speaker and points were allotted for valid interjection. A Q&A session for the audience was also conducted. **Anurag Deo**, *4th sem, ECE*, **Lakshya Raj**, *4th sem*, *DCE*, and **Ishan Dutta**, *4th sem, CSE* were the 1st, 2nd**,** and 3rd placeholders respectively. The event concluded with distribution of prizes worth ₹12,000.

Session on International Year of Millets by National Service Scheme

National Service Scheme (NSS), NIT Raipur organized an informative event to celebrate the **International Year of Millets** on 18th Jan. 2023. The event was successfully conducted under the supervision of **Dr. Govardhan Bhatt**, *Professor In-charge*, *National Service Scheme (N.S.S)*, *NIT Raipur*. **Dr. P. Y. Dhekne**, *Registrar (Officiating)* graced the event with his presence. **Dr. Vinod Choudhry**, *Senior Scientist, IARI Raipur* was the guest speaker for this event. Members of the **Akshay Patra Foundation** were the guests of honor.

The event began with a lamp lighting ceremony by **Dr. Vinod Choudhary** and **Dr. Govardhan Bhatt**. **Dr. Vinod Choudhary** was felicitated by **Dr. Govardhan Bhatt**, and then he enlightened all the students about the initiative taken by our honourable Prime Minister, **Shri Narendra Modi** to declare 2023 as the **International Year of Millets**. **Dr. P.Y.**

Dhekne was then felicitated by **Dr. Govardhan Bhatt**. He thanked **Dr. Vinod Choudhary** for attending the session and explained the significance of millets in maintaining a healthy body. **Dr. Vinod Choudhary** then began his presentation by explaining the importance of millets.

The event was successfully concluded by **Prof. U. K Dewangan**, *HoD*, *CE* by felicitating volunteers from **Akshay foundation** and **Dr. Vinod Choudhary** by presenting a memento as a gesture of gratitude.

Robotix Club Activities

Workshop on Robot Path Planning

Robotix Club, NIT Raipur organized a workshop on **Robot Path Planning** on 21st Jan. 2023. The event was conducted under the guidance of **Dr. Rajesh Doriya**, *Faculty In-Charge, Robotix.* The speaker for the event was **Ms. Pallapothala Tejaswini**, *M. Tech, IT*. The participants were given hands-on experience in programming and operating robots and the opportunity to work on real-life projects. The faculty and experts were available to guide the students throughout the event, providing them with the feedback and answering their doubts. The workshop was attended by students from the institute, as well as by several experts from the field of robotics. In this workshop, robot path planning was done by the students and their problems were also solved. The workshop concluded with creating curiosity in the minds of the students towards the field of robotics.

Workshop on Home Automation Technology

Robotix Club, **NIT Raipur**, organized a workshop on **Home Automation Technology** on 18th Feb. 2023, under the guidance of **Dr. Rajesh Doriya**, *Professor In-charge*, *Robotix*, aimed at enlightening and imparting knowledge on the domains of Internet of Things (IoT), Web Development and Integration of IoT & Web Development. Participants were taught Home Automation using NodeMCU (ESP8266, DSP11), utilizing microcontrollers like the ESP8266, NODEJS, front-end and back-end web development along with HTML and CSS programming skills. Application of ARDUINO IDE programming was examined in determining if light switches should be turned on using the LDR sensors. Temperature and humidity values were obtained using DSP11. Microcontroller values were sent to the servers of the websites they created for further processing. The workshop was concluded successfully after an interactive session.

Sahyog- The Mentorship Club Activities

Placements Guidance Session

Sahyog-The Mentorship Club, NIT Raipur organized a two-day online placements guidance session called *Placemantra* on 7th and 8th Jan. 2023. Numerous students across various branches of the institute had actively participated in the session. The session was mainly centred around SDE, Analyst and Core job roles. Some of the recently graduated alumni of the institute, placed in top corporates and companies across the globe, were the guest speakers.

Ms. Priyanshi Sharma, *SWE, Google,* **Mr. Viren Khatri,** *SDE, Amazon,* **Mohd. Faizan,** *SDE-1, Flipkart,* and **Ms. Minal Mehta,** *Technical Staff-1, Adobe* were the speakers for the SDE segment, which was conducted on day-one. Some of the major topics covered during the session were- Programming languages for Beginners, Roles of Networks, Hackathons and Competitions, Roadmaps for Freshers, Role of Clubs and Committees in Software Placements, Significance of Coding as a Soft Skill, Significance of Certifications, Importance of Projects, etc. The second segment for Day-1 dealt with Analyst roles. **Ms. Sakshee Choudhary**, *Business Analyst, ZS Associates,* **Mr. Rachit Katiyar,** *Analyst, Goldman Sachs,* **Ms. A. Hari Priya,** *Imagineer, Fractal,* **Mr. Vaibhav Agrawal,** *Business Analyst, Amazon* were the esteemed speakers. Some of

the topics mainly covered in this segment were Prerequisites for being an Analyst, Career Growth in the Analytics Industry, Broadness of Data Science, Data Analyst v/s Business Analyst, etc. The segments concluded with a Q&A session.

Day-two observed a dedicated session on Core job offers. The esteemed speakers for the session were **Ms. O. Pramila,** *Vedanta Limited,* **Mr. Shikhar Sachan,** *EIL,* **Mr. Saurabh Barman,** *Cairn India,* **Mr. Pujari Swamynath,** *L&T Construction.* The speakers shared their college experiences and stressed upon the importance of College Academics. Career prospects and significance of PSUs were also discussed in the session. The session ended with a highly engaging Q&A session. The two-day long session proved to be highly beneficial to all the attendees.

Organized Mock Placements

Sahyog- The Mentorship Club, **NIT Raipur** started off their Mock Placements event on 14th Jan. 2023 under the guidance of **Dr. Ravi Jade**, *Faculty In-Charge*, *Sahyog*. Students across all the branches from all the years actively participated in the same. The competition was conducted in 3 rounds - Online Screening, Group Discussion and Personal Interviews, in hybrid mode. The competition served to be a great drilling and testing opportunity to all the students for honing their basic requisite skills for actual placements by painting a clear picture of how intense the current competition is.

Sanskriti- The Cultural Committee Activities

Makar Sankranti

Sanskriti-The Cultural Committee of **NIT Raipur** celebrated **Makar Sankranti** or **Uttarayan** and **Pongal** on 14th Jan. 2023. The event was enamoured by the presence of **Dr. Lata Upadhyay**, *Faculty In-Charge, Sanskriti,* **Dr. Govardhan Bhatt**, *Assistant Professor*, *Civil Engineering*, **Dr. Chinmay Mahapatra**, *Assistant Professor*, *Biotechnology*, and **Dr. R. B. Naik**, *Assistant Professor*, *Metallurgical & Materials Engineering*, and other faculty members of the institute. Kites were distributed to the students and the faculties present. The students and faculties showed great zeal and enthusiasm flying kites.

Eclectika'23

Sanskriti-The Cultural Committee of NIT Raipur inaugurated **Eclectika'23**, Central India's largest Fest, on 10th Feb. 2023. The 3-day fiesta was organized under the leadership of **Dr. Lata Upadhyay**, *Faculty In-Charge*, *Sanskriti,* and the guidance of **Dr. P. Y. Dhekne**, *Registrar (Officiating)*. **Dr. Samir Bajpai**, *Head*, *Career Development Centre*, was the Chief Guest of the inauguration ceremony. **Dr. P. Y. Dhekne**, **Dr. Shubhashis Sanyal**, *HoD, Mechanical Engineering*, and **Dr. Prabhat Diwan**, *Dean (R&C)*, were present at the occasion as Special Guests. The ceremony began by welcoming dignitaries with a sapling and lamp lighting ceremony.

Day 1 of the fest witnessed multiple Mega-Events. **Kalopsia- an art competition and exhibition,** was held, in which **Aayush Singh**, *B.Arch.* emerged as the winner and **Anushka Gupta**, *EEE* the runner up. **Avirbhav**- a war of bands was conducted, in which the band **Shubham Collective** won, and **Unplugged Diaries** ended as runners up. **Goonj- the Nukkad Natak** contest was won by the **Rajbhasha Samiti**, and **Abhinay-The Dramatics Club** were the runners up. Additionally, innumerable mini events, like **Rap Battle**, **Talent Hunt**, **Musical Math**, **Youth Chef**, etc. were also conducted. The ultimate event of the Day was **Cult Nite**, wherein performances by **Team Raaga**, **The Music Club** and **Team Nrityam**, **The Dance Club** of **NIT Raipur** and various other students at the institute were witnessed.

Day-2 commenced with numerous exciting events. **Allure-The Fashion and Talent Show** was held in which **Samarth Surya Mishra** stood **1st**, **Aabidha Muskan** and **Megha Rathi** shared the **2nd** position and **Aqsa Khan** on the **3rd**. **Nrityangan** was organized in which **Aditi Shivaprasad** emerged as the winner and **Gayatri Sahu** as runner up. **Eclectika Dancing Star** was conducted in which **Utkarsh Singh** bagged the **1st** position and **Bhupendra Raaj Guru Sahu** and **Ritesh Singh Thakur** as runners-up. In the **Eclectika Idol**, the **1st** was given to

Yashvardhan Sharma, **Bhavya Surana** stood **2nd** and **Shivesh Dwivedi** bagged the **3rd** place. Various other mini events like **Paper Topia, Abhivyakti, Jurassic Chase, Karaoke Saga, Hansdard, Slam Poetry, Mr Olympia, Rangoli, Best Out of Waste, TEDx Event, Musical Math, NIT's Talent Hunt, Youth Chef** also took place. The evening was illuminated by sky lanterns extravaganza organized by **Team TEDx**. The highlight of the evening was the long-awaited **Artist Night** which was graced by the presence of **Amrita Talukdar**, *singer, and composer* with her band **Amrita Live** and **Yohani**, *playback singer*. The final day comprised of several events like **Tafree-Stand-up Comedy**, wherein, **Suraj Prakash** stood **1st**, **Ansh Shrivastava** secured **2nd** and **Prateek Singh** secured **3rd** place respectively. In the **Clash of Choreos**, **Aflix Crew (Gulshan Varma and team)**, *GNA college* secured **1st**, **Yash Rao**, **VIPRA**, stood **2nd** and **VS Anagha**, *NIT Raipur* secured **3rd** place. Absorbing events like **Pictionary and Quiz**, **Beat the Twist**, **Mould Your Way**, **Blog/Creative Writing**, and **Sudoko** were also organized. The three-day fest concluded successfully with an enthralling Electronic Dance & Music (EDM) night with **Kawal**, and **Illusion x Psyklone** as Disco Jockeys for the night.

SAMAR 2023 by Shaurya

Shaurya-The Sports Committee, **NIT Raipur** organized **SAMAR**, institute's annual sports, fest from 26th to 29th Jan. 2023. **Dr. (Mrs.) A. B. Soni**, *Director (I/C)*, *NIT Raipur* was the Chief Guest. **Dr. (Mrs.) A. B. Soni** inaugurated the event by lighting the fire torch, in the presence of **Dr. Shrish Verma**, *Dean (Academics)*, *the Guest of Honor* and **Dr. P. Y. Dhekne**, *Registrar (Officiating).* The fest was organized under the supervision of **Dr. Rajesh Doriya**, *Professor In-Charge*, *Shaurya.*

Abhinay- The Dramatics Club (ATDC), NIT Raipur and **Shaurya** organized **Unkahi 18.0**, an Open-Mic event, under the guidance of **Dr. Govardhan Bhatt**, *Faculty In-charge*, *ATDC*, and **Dr. Rajesh Doriya** on 27th Jan. 2023.

Samar included numerous competitions and athletics sports under intercollege and interbranch categories. In the intercollege category, the winners of football, volleyball and basketball were **Shankaracharya Group of Institutions-Bhilai**, **NIT Raipur** and **Saint Thomas** respectively. In the interbranch girls' category, **Departments of Information Technology, Biotechnology, Civil Engineering, M. Tech** won in badminton, volleyball, and kabaddi respectively; **Departments of Chemical Engineering, Electronics & Communication Engineering and Electrical Engineering** won in cricket and kho-kho respectively. In the interbranch boys' category, **Departments of Civil Engineering, Computer Science & Engineering and MCA** won in chess, kabaddi, and volleyball; **Departments of Chemical Engineering and Electrical Engineering** won in badminton, **and Departments of Biotechnology and Information Technology** in kho- kho, and **Departments of Mechanical Engineering and Electronics and Communication Engineering** won in football. The overall interbranch category for girls and boys was won by **Departments of Biotechnology, Civil Engineering, M. Tech & Information Technology**, and **Departments of Computer Science & Engineering, Civil Engineering and MCA** respectively.

The closing ceremony was organized with **Dr. Rajesh Tripathi**, *Dean (Planning & Development)* as the Chief Guest and **Dr. Prabhat Diwan**, *Dean (R&C)* as Special Guest on 29th Jan. 2023. **Chelsy Gangwar**, *Overall Coordinator*, *Shaurya,* highlighted the overview of SAMAR 2022-23. Team Shaurya felicitated the children of **Kopal Vani Child Welfare Organization**, *NGO*, *Raipur*. **Dr. Rajesh Doriya** delivered the vote of thanks and concluded the four-day fest successfully.

Aavartan 2023 by Technocracy

Technocracy- The Technical Committee, **NIT Raipur** organised its annual tech-festival **Aavartan'23** from 4th to 5th Feb. 2023. **Mr. Manoj Khare**, *MD*, *CSPDCL* served as the Chief Guest for the inauguration ceremony. **Dr. (Mrs.) A. B. Soni**, *Director (I/C)*, *NIT Raipur* and **Dr. Samir Bajpai**, *Head*, *Career Development Centre (CDC)* were the special guests. **Dr. Manu Vardhan**, *Faculty in-charge*, *Team Technocracy* and **Dr. Anuj Shukla**, *Faculty in-charge*, *AAVARTAN* were also present at the inaugural ceremony.

Day-1 of Aavartan witnessed a series of enthralling events and competitions like **Vigyaan**, a Science Exhibition competition, **Valorant E-tournament**, **Treasure Hunt**, **VR Show**, **Best out of waste**, **Circuitrix**, **Robotrek**, **Blind Coding**, **Animatrix**, **Beg Borrow Steal**, **Jenga**, **Click O Vartan**, and **Ecopolis**, etc.

Day-1 was concluded by a series of cultural performances by **Team Nrityam- The Dance Club**, **NIT Raipur**, **Team Raaga-The Music Club**, **NIT Raipur**, and a Celeb Show. Day-2 further staged events like Open mic, **Code Tag**, **Motosports**, **Shipwreck**, **Scavenger hunt**, **Circuitrix**, **Techonomic Quotient**, **Speedcubing**, and **Hydrolift**, etc.

The 2-day fest concluded with a formal closing ceremony. **Dr. Shrish Verma**, *Dean (Academics)* was present as the Chief Guest and **Dr. Samir Bajpai**, *Head*, *CDC* was present as the Distinguished Guest. **People's Choice Awards** for the various models in **Vigyaan**, the National Science Exhibition, were presented. **Team Pacifiers** who were given problem statements from the **Electronics & Communication Engineering Department** and **Team Dumb Dumber Dumbest**, who were given the same from the **Department of Information Technology**, secured 1st and 2nd place respectively. Winners and runners-up from every department were felicitated. The 2-day fest concluded with **Team Technocracy** delivering the vote of thanks and expressing their gratitude to all the faculties, participants, audience, and sponsors.

Tedx Talks 6.0 by TEDx

TEDx Club, **NIT Raipur** organized the sixth edition of its annual flagship event, **Ted-Talk** on 5th Mar. 2023 at the **Pt. Dindayal Upadhyay Auditorium**, **Raipur**, promoting the theme of **Dare, Defy, Differ**. The event was conducted under the guidance of **Dr. Sanjeev Das**, *Faculty In-charge*, *TEDxNITRaipur*. **Brig. A. K. Das**, *VSM (retd.)*, *Ex-NCC Group Commander*, *Indian Army* and **Shri Vikas Upadhyay**, *MLA*, *Raipur* graced the occasion with their presence as the Guests of Honor. The event was inaugurated with the lamp lighting ceremony by **Brig. A.K. Das**, in the presence of **Dr. Sanjeev Das**, **Dr. D.C. Jhariya**, *Assistant Professor*, *DAG*, **Dr. Ramavath Bheekya Naik**, *Assistant Professor*, *MME*. The special guest of the event was **Mr. Vikas Upadhyay**, *MLA*, *Raipur*.

Mr. Deepak Pareek, *Social Media Entrepreneur & Influencer*, **Ms. Aarzoo Khurana**, *Wildlife Photographer*, **Mr. Ocean Sharma**, *E-sports Analyst*, **Mr. Rajat Sood**, *Comedian*, **IPS Anand Jain**, *Director*, *Anti-Corruption Bureau*, *J&K*, **Mr. Prakhar Kotadia**, *Climate Activist*, and **Gp Capt. Y. Shrinivas**, *Veteran*, *Indian Air Forces* were present as Guest Speakers. The event started with the TEDx Talk of **Gp Capt Y Srinivas**. He primarily shared his insights on veterans transitioning back to civilian life. The second speaker was **IPS Anand Jain**, who is also an alumnus from the 1999 batch of the **Mechanical Engineering Department** of the institute. His journey from a small town to the bureaucratic system of the nation served as an inspiration to the listeners. The third speaker, **Deepak Pareek** ignited inspiration in youngsters as he took the stage. **Ocean Sharma**, who is a professional esports player and gaming commentator was there to set the stage ablaze. **Ms. Aarzoo Khurana** talked about women's empowerment. The next speaker, **Mr. Prakhar Kotadia**, who is the founder of the NGO **Roopkesarvatika**, talked about creating a sustainable future. Then, **Mr. Rajat Sood**, who was the winner of the Reality Stand Up Comedy, **Show-India's Laughter Champion**, was the last speaker for this edition.

The event was further enhanced by various cultural performances by **Nrityam - The Official Dance Club**, **NIT Raipur**, **Raaga - The Official Music Club**, **NIT Raipur**, and artistic poetry delivered by the students of **NIT Raipur**. The event concluded with the speakers being felicitated with mementos and certificates as a token of respect.

Turing Club of Programmers Activities

Workshop on Fundamentals of Cloud & Databricks and Guidance on Placement & Resume Building

Turing Club of Programmers (TCP), NIT Raipur organized a two-day workshop on **Fundamentals of Cloud & Databricks and Guidance on Placement & Resume Building** as a part of Codeutsava, the annual coding fest of TCP, on 14th & 15th Jan. 2023. The workshop was organized under the supervision of **Dr. Pavan Mishra,** *Faculty In-charge, TCP.* **Mr. Rohit Agarwal,** *Senior Software Engineer, Optum* was Guest Speaker of the event. He is also an alumnus (2019) of the institute.

Mr. Rohit elaborated on cloud computing & data bricks and its significance on day one. He discussed the general stages in placement/internships and emphasized the important points that helps set the tone of the interview. Instructions and valuable suggestions on resume building were also given by him on day two. He concluded the workshop by sharing his internship and full-time experience and with a Q&A session.

Workshop on Competitive Programming and Algorithm Road Map

Turing Club of Programmers (TCP), NIT Raipur organized a two-day workshop on *Competitive Programming and the Ultimate Algorithm Roadmap* as a part of the 2nd instalment of **Codeutsava 6.0** on 21st and 22nd Jan. 2023. The event was organized under the guidance of **Dr. Pawan Mishra**, *Faculty*

In-Charge, *TCP*. **Mr. Prateek Narang**, *Software Development Engineer*, *Google*, *Co-Founder*, *Coding Minutes* was the Guest Speaker for the session. Day-one started with some of the most crucial coding algorithms like Brute Force, Backtracking, Divide and Conquer, Greedy Algorithm and Dynamic Programming and optimization techniques on Arrays like Prefix Sum, Carry Forward, Hashing, Sliding Window, and Two Pointer were discussed in detail. Day-two served as a further extension for discussion on the aforementioned algorithms and techniques. Q&A sessions were organized and students who answered were awarded gifts. The event concluded with certificates distributed among the attendees.

Organized Codeutsava 6.0

Turning Club of Programmers (TCP), **NIT Raipur** conducted the sixth edition of its annual flagship event, **Codeutsava 6.0** from 11th to 12th Feb. 2023. The event was organized under the guidance of **Dr. Pawan Mishra**, *Faculty In-charge*, *TCP*. The event began with the inaugural ceremony. **Dr. Shrish Verma**, *Dean (Academics)*, **Dr. Sudhakar Pandey**, *Associate Professor*, *IT*, **Dr. Pawan Mishra**, *Assistant Professor*, *IT*, **Dr. Samir Bajpai**, *Professor*, *CE*, and **Dr. Rakesh Tripathi**, *HoD*, *IT* were the Special Guests for the inaugural ceremony. Faculty members of the Departments of CSE and IT also served as the guests.

Dr. Rakesh Tripathi congratulated the IT Department for organizing Codeutsava. **Dr. Samir Bajpai** emphasized the fact that technology is not at all branch-specific and every student should keep themselves updated with ongoing and futuristic facilities. **Dr. Shrish Verma** stressed the importance of having platforms like TCP that promote technology. Day-1 witnessed the 28-hour long annual hackathon alongside various events like **IT quiz**, **code riddles**, **logo designing for brand**, and

round-1 of the **Ultimate Gaming (Valorant)** with participants from other colleges and cities as well. Three 2-day workshop sessions on technical topics like **Cloud Computing**, **Data Structures** and **Algorithms**, and **AI Chat GPT** further added on to the overall exuberance of the event.

Day-2 observed the further segments of the hackathon and the technical workshops, and round-2 of the Ultimate Gaming (Valorant). **Dr. Samir Bajpai** and **Dr. Bikesh Kumar Singh**, *HoD*, *BME* served as the Guests of Honor in the closing ceremony. Over 105 teams with more than 1000 participants participated in the hackathon, of which 25 teams were finalized from prominent institutes. Team **Technicutives** from *NIT Raipur* won the **1st prize**, followed by Team **Synchronised Minds** bagging the **2nd prize** and Team **The Scripters** bagging the **3rd prize**. Prizes worth 10 lakhs were distributed among the winners.

Guidance Session for Civil Services Examination

Turing Club of Programmers (TCP), **NIT Raipur** in collaboration with **Think IAS** organised a guidance session on the Civil Services preparations on 16th Feb. 2023. **Mr. Rahul Deo**, *District Collector*, *Mungeli*, *Chattisgarh* was the speaker. The event was supervised by **Dr. Pawan Mishra**, F*aculty In-Charge*, *TCP*. **Mr. R. Deo** talked about his IAS preparation journey and the coaching culture in India. He advised the aspirants to give their best in the first attempt itself and gain knowledge and wisdom. **Mr. Rahul Kumar Jaiswal**, **Mr. Murali Manohar Dewangan**, and **Mr. Aniruddh Tiwari**, *Directors*, *Think IAS* briefed the students for some time and cleared some of their doubts. The interactive session ended with the vote of thanks by **Dr. Pawan Mishra**, *Faculty In-Charge*.

Unnat Bharat Abhiyan Activities

Inspection Visit

Team Unnat Bharat Abhiyan (UBA), **NIT Raipur** organized an inspection visit to all the Participating Institutes (PIs) from 3rd to 25th Feb. 2023. The team involved for the visit were **Dr. Sudhakar Pandey**, *Regional Coordinator*, *UBA*, **Dr.**

Manikant Verma, *Member*, *UBA*, **Dr. Jagadish**, *Member*, *UBA* and **Mr. Sachin Kotwani**, *Office Assistant*, *UBA*. The committee visited 6 newly joined PIs.

The purpose of the inspection visit was to motivate the PIs for actively participating in UBA, evaluate the activities of PIs, collection of reports, support, and suggestion of PIs. During the inspection visit, the RCI-UBA team evaluated the activities of PIs such as receiving seed funds, formation of UBA cell, UBA survey work, project proposals, and so on.

Guest Lecture on Funding Opportunities on Humanitarian Projects by Unnat Bharat Abhiyan

Unnat Bharat Abhiyan (UBA), **NIT Raipur** organised a guest lecture on **Funding Opportunities on Humanitarian Projects to meet SDGs through IEEE** on 23rd Feb. 2023, by **Dr. Vijayalaxmi Biradar**, *WIE Chair*, *IEEE*, *M.P. Section 2023*. Event was successfully organised under the guidance of **Dr. Sudhakar Pandey**, *Regional Coordinator*, *UBA* and in the presence of **Dr. S. Pandey**, **Dr. Jagadish**, *UBA member,* **Dr. N.V. Swamy Naidu**, *Associate Professor*, *Mechanical Engineering*, **Dr. Govind P. Gupta**, *Assistant Professor*, *Information Technology*, **Mr. Sachin Kotwani**, *UBA staff*, PhD scholars and various students. The session began with **Dr. Vijayalaxmi's** talk on the Sustainable Development Goals, IEEE funding opportunities, IEEE Preu STEM grants, Student Professional Awareness Program (SPAP), SPS & HAC projects, etc. along with guidelines for writing IEEE funding projects with references. The event was concluded successfully with the Q&A session and a memento was presented to **Dr. Vijayalaxmi** by **Dr. S. Pandey**.

Contribution to the Institution

Donations

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

Appeal

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

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