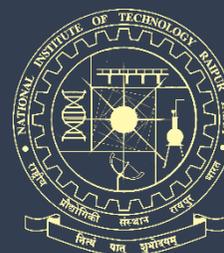




NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

Mirror



VOLUME 4 ISSUE 4

Reflecting the True Spirit of NIT Raipur.

1st January 2022

Director's Message for the New Year 2022



Dear Colleagues and Well-wishers, I convey my heartiest greetings to everyone for a very happy, healthy, and prosperous New Year 2022. I wish for your and your family's well-being and hope that you welcomed this New Year with great joy and enthusiasm.

We all know that the bygone year 2021 was another unprecedented year due to the COVID-19 pandemic and afflicted us in some way or the other. It is deeply saddening that we lost some past and present members of our NIT Raipur family due to the COVID-19 pandemic. Nevertheless, working with determination to lead our institution on the path of progress will be a true tribute to them. Looking at the brighter side from the point of view of NIT Raipur, the NIRF Ranking of our institute improved for the fourth consecutive year in 2021 with 64th NIRF Rank in the Engineering Institutions category. NIT Raipur for the second year consecutively also acted as the Coordinating Institute for the NIT MCA Common Entrance Test (NIMCET) which was successfully conducted nationwide as a computer-based test by following all the Government's directives and protocols for COVID-19. In order to foster a vibrant and flexible environment of interdisciplinary research, entrepreneurship and innovation, NIT Raipur's Innovation and Start-up policy and 'Vision 2030' were formulated in 2021 and

have been approved by the Board of Governors. Also, the institute is in the process of setting up the NIDHI Technology Business Incubator (TBI) – 'NIT Raipur Foundation for Innovation and Entrepreneurship' which will be established soon. To further strengthen our campus infrastructure, we commissioned a Data Center and Grid Connected Solar Power Plant in the campus last year. We also initiated the novel practice of organizing monthly Brainstorming sessions on National Education Policy (NEP) 2020, Institute Lecture series and Online Edutainment Sessions for the institute fraternity. Like previous years, several MoUs were also executed in 2021 with Institutions and Industries to further enrich our ties and research collaborations. In 2021, 32 external candidates recruited to the posts of Assistant Professor joined our NIT Raipur family and 60 Assistant Professors were upgraded to higher academic grade pay. Regular Registrar and Deputy Registrar were also recruited, while 03 non-teaching staff members were promoted to higher grade. Our students, alumni, faculty, and staff continued to bring many laurels to the institute. I take this opportunity to congratulate them for bringing laurels to the institute and hope that this trend gets better in the years to come.

Now, as we look forward to the New Year of 2022 with high hopes and happiness, I urge my NIT Raipur family to continue working together with the best of our abilities and making ethical use of the power of technologies to achieve our Vision. I am confident that NIT Raipur will continue to excel in this path of progress with your continued support and unified efforts. With a hope of COVID-19 pandemic-free world and to see my dear students back in the campus soon, I once again wish you all good health, good fortune, happiness, and success in the New Year 2022.

Prof. A. M. Rawani, Director, NIT Raipur

Institute News

Twelfth Convocation Ceremony



NIT Raipur organised its 12th Convocation Ceremony on 1st Dec., 2021, in virtual mode. Degrees and medals were presented to the Undergraduate, Postgraduate and PhD students. A total of **1129 students**, including **832 graduates**, **222 postgraduates** and **75 PhDs**, were conferred with the degrees wherein **51 medals** were given out, including **28 Gold** and **23 Silver Medals**. **Dr. A. M. Rawani**, Director and Acting Chairman, BoG NIT Raipur, chaired the ceremony. **Dr. K. Sivan**, Secretary, Department of Space; Chairman, Space Commission and Chairman, Indian Space Research Organization (ISRO) delivered the convocation speech. **Dr. A. M. Rawani** presented the Annual Institute Report and shared the significant accomplishments of NIT Raipur. **Dr. K. Sivan** motivated the

graduating students to take the responsibilities and make this world a better place in the currently transposing global scenario. He emphasised on the immense opportunities in present world for innovators and startup entrepreneurs. Furthermore, degrees of Ph.D., M.Tech., MCA, B.Tech. and B. Arch. were conferred virtually. This was followed by the medal distribution in which **Ms. Harshita Sharma**, Department of Computer Science and Engineering, the **overall B.Tech. Topper** with a **CPI of 9.99** was conferred the **Institute Gold Medal**. **Dr. A. M. Rawani** administered the oath to the degree recipients and declared the convocation closed.



Foundation Day Celebration

NIT Raipur celebrated its **Foundation Day** on 1st December 2021 in hybrid mode. **Shri. Susheel Verma**, Outstanding Scientist & Director, Recruitment and Assessment Centre (RAC), Defense Research & Development Organization (DRDO), Ministry of Defense, Govt. of India, was the **Chief Guest** of the event. **Dr. A. M. Rawani**, Director, NIT Raipur, presided over the function. **Dr. P. Y. Dhekne**, Dean (Student Welfare, NIT Raipur), gave welcome speech. **Shri. S. Verma**, who joined the event online from Delhi, appreciated the initiatives taken by the Institute to provide the students with a platform to make their voices heard. He also applauded the faculty members for taking the initiative to interact with the students even during this dire and stressful time of Covid-19. **Dr. A. M. Rawani** spoke about the importance of integrating technology and digital infrastructure in the education sector. This was followed by the Awards Ceremony, in which the **Best Department Award** was conferred to the **Department of Applied Geology (DAG)** and the **Department of Electrical Engineering (EE)** jointly. **Dr. S. Ghosh**, Associate Professor, EE, secured the **Best Faculty Award**. The **Best Researcher Award** was bagged by **Dr. A. Kumar**, Assistant Professor, Department of BioTechnology (DBT). The **Distinguished Alumnus Award** was awarded to **Dr. Rohit Kumar Gupta**, Scientist- SG, Vikram Sarabhai Space Centre, ISRO (B.E. – Metallurgical Engineering, 1998 Batch). The students were also bestowed with prestigious awards.



Induction/Orientation Program 2021

NIT Raipur organized an online **Induction/Orientation Program** welcoming newly admitted students of batch 2021-25 on 14th Dec., 2021. **Dr. A. M. Rawani**, Director, NIT Raipur presided over the program. The program was coordinated by **Dr. P. Y. Dhekne**, Dean Students Welfare, **Dr. N. K. Jain**, Associate Dean, Students Welfare and **Mr. M. Tenguriya**, Assistant Professor, Department of Architecture. **Dr. A. M. Rawani** steered and guided the students for their academic development during college life. **Dr. S. Verma**, Dean Academics, explained entire educational process and marking schemes of the Institute. **Dr. P. Y. Dhekne**, Dean Students Welfare, talked about scholarships and co-curricular activities and **Dr. M. K. Chopkar**, Professor In-Charge, placement Cell, addressed about CDC, placements and job opportunities. A virtual tour of the Institute was organised to help the students to grasp the atmosphere and ambience of the Institute. The program was streamed live on various social media platforms of the Institute.



Industry Institute Conclave-2021

NIT Raipur hosted the third consecutive edition of the **Industry Institute Conclave** virtually on 22nd-23rd Oct 2021, which was organised by the **National and Industrial Collaboration Cell (NICC)** of the Institute. **Dr. S. L. Sinha**, Chairperson, NICC organised this under the guidance of **Dr. A. M. Rawani**, Director, NIT Raipur. The Chief Guest of the inaugural function was **Dr S. Sancheti**, Vice-Chancellor (Provost) Marwadi University, Rajkot and the Chief Guest of the Valedictory function was **Prof. M. P. Gupta**, Modi Foundation Chair Professor, Department of Management Studies, IIT Delhi. The experts were invited from various countries for effective industry-institute interactions. **Dr. N. V. S. Naidu**, Associate Professor, Department of Mechanical Engineering (ME) and **Dr. H. Bikrol**, Associate Professor, Department of Master in Computer Application (MCA), were the event coordinators.



Inauguration of 490.1 kW Solar Power Plant



NIT Raipur recently installed the **490 kW Solar Power Plant**, which was inaugurated by **Dr. A. M. Rawani**, *Director, NIT Raipur* on the 17th Foundation Day of the Institute. The Rooftops of all the existing buildings are utilised for installing solar panels and power generating equipment. The project provides not only power saving to the campus through solar generation, but it also provides enough data and information for doing research work on solar PV renewable energy systems. The installation of Grid Connected Rooftop Solar Power Plant will be in RSCO mode to reduce the expenditure of a substantial amount of public money without any financial inclination on the part of NIT Raipur.

Inauguration of Rock Fountain

The **Rock Fountain**, constructed in Shahid Lt. Arvind Shanker Dixit Memorial Garden of the Institute, was inaugurated by **Dr. A. M. Rawani**, *Director, NIT Raipur*, on 1st Dec., 2021, the 17th Foundation Day of the Institute.

Celebration of Constitution Day

Constitution Day 'Samvidhan Divas' was celebrated on 26th Nov., 2021, in the Visvesvaraya Hall, NIT Raipur, to commemorate the adoption of our Constitution. All the faculty and staff members virtually joined with the **Honorable President of India** and read the **Preamble of the Constitution** through digital platforms.

Vigilance Awareness Week

NIT Raipur conducted **Vigilance Awareness Week** in online mode from 26th Oct., 2021 to 1st Nov., 2021 under the guidance of **Dr. S. Verma**, *Chief Vigilance Officer*. Theme of this week was '*Independent India @ 75: Self Reliance and Integrity*'. **Abhivyaakti**, an online event was organised on 27th Oct., 2021, where participants showcased their talent of mono-acting and storytelling through videos supporting the theme. An online event "Roobaroo" was conducted on 30th Oct., 2021 by **Abhinya-The Dramatics Club** for creating awareness about the ill effects of corruption. Oath Taking Ceremony on fight against corruption was conducted on 1st Nov., 2021. All the Deans, HoDs and faculty members were present during the ceremony. A separate oath taking ceremony was organised for students on 1st Nov., 2021 to generate awareness against corruption.

Awareness Camp and Demonstration of UBA projects

NIT Raipur organised **Awareness Camp and Demonstration of UBA projects** on 20th Oct., 2021 at village Kara and Bendri.

The program's main objective was to promote industrialisation, entrepreneurship, and economic strength in the villages. The projects received by NIT Raipur under Unnat Bharat Abhiyan are Skill development campaign for low-cost bamboo-based skewer sticks making technique in Bendri village, the Development of eco-friendly bricks from natural waste resources for low-cost housing structures and Green manufacturing technology for rural industrialisation and entrepreneurship development in Chhattisgarh. All these micro-rural development projects were started in January 2021. The training program was organised under the supervision of **Dr. Jagadish**, *Principal Investigator, UBA* and **Dr. S. Pandey**, *Regional Coordinator, RCI UBA NIT Raipur*.



Annual Alumni Day 2021

Alumni Association of GECNIT, Raipur of NIT Raipur (erstwhile Govt. Engineering College), the largest and the oldest technical education institution in Chhattisgarh, celebrated Annual Alumni Day 2021 in synchronization with Golden Jubilee Reunion of 1970 and 1971 batches and Silver Jubilee Reunion of 1995 and 1996 batches on 24th Dec., 2021. The Alumni Day Celebration started in the presence of **Dr. A. M. Rawani**, *Director, NIT Raipur* as Chief Guest, **Mr. K D Diwan**, *President, Alumni Association of GECNIT Raipur* and **Mr. A. S. Parihar**, *Secretary, Alumni Association of GECNIT Raipur*. More than 300 alumni participated from all over India and few from abroad.



Brainstorming Sessions on Implementation of NEP 2020

In a proactive approach towards implementing **National Education Policy (NEP) 2020** into the ordinances of NIT Raipur, **Dr. A. M. Rawani**, *Director, NIT Raipur*, announced theme-based monthly brainstorming sessions on various policies of higher education on 15th Aug., 2021. The first session on the '*Holistic and Multidisciplinary*' aspect of HEI's was conducted

on 24th Sep., 2021. Convener of this session was **Dr. N. K. Nagwani**, *Associate Professor, CSE*. Second session was conducted on 'Catalysing Quality Academic Research' on 29th Oct., 2021. Convener of this session was **Dr. S. Ghosh**, *Associate Professor, EE*. Third session was conducted on 'Re-imagining Vocational Education' on 26th Nov., 2021 convened by **Dr. R. N. Patel**, *Associate Professor, EE*. Fourth session was conducted on 'Technology Use and Integration & Online and Digital Education' on 23th Dec., 2021. Convener of this session was **Dr. A. Keshav**, *Associate Professor, DCE*.



Institute Lecture Series

Department of Metallurgical and Materials Engineering, NIT Raipur, organised the **Institute Lecture** on 30th Oct., 2021. The distinguished speaker for the session was **Dr. Rohit Kumar Gupta**, *Scientist at Vikram Sarabhai Space Centre, ISRO, Trivandrum*, who delivered the lecture on the *Development of Materials and Manufacturing Technologies for Space Applications*.

Department of Biomedical Engineering organised the "Institute Lecture Series" on 27th Nov. 2021. **Dr. K. Mohanavelu**, *Scientist & Head - Biomedical Technologies, DEBEL, DRDO, MoD, Bangalore*, was delivered an expert lecture on the topic '*Applications of Biomedical engineering in Defence Research.*'

Department of Chemistry, NIT Raipur, organised the **Institute Lecture** on 18th Dec., 2021. The distinguished speaker for the session was **Dr. Suresh Sudam Umare**, *Professor (HAG), Department of Chemistry, VNIT – Nagpur* who delivered an expert lecture on the topic '*Green Chemistry Education and Environmental Sustainability*' through virtual mode.

Academic Activities

Conference /STTP/ Workshop conducted

MIND-2021 International Conference

Department of Information Technology (IT), virtually organized 3rd International Conference on **Machine Learning, Image Processing, Network Security and Data Sciences (MIND-2021)** on 11th and 12th Dec., 2021. **Dr. R. Doria**, *Assistant Professor, IT* chaired the conference and **Dr. S. Kumar**, **Dr. G. K. Verma**, and **Dr. R. R. Jhangel**, *Assistant Professors, IT* were the organizing secretaries of the conference. **Prof. Rajkumar Buyya**, *Melbourne University, Australia*, was the honorary Chair. **Prof. R. K. Shyamasundar**, *IIT Bombay (Fellowship, Indian Institute of Sciences)* and **Prof. Ugo Fiore**, *Parthenope University, Italy*, delivered the keynote speeches. All the selected papers will be published in the **Scopus indexed LNEE series of Springer**.

4th International Conference on Information Systems and Management Science (ISMS 2021)



4th International Conference on Information Systems and Management Science (ISMS 2021) was jointly organized by **Department of Computer Science and Engineering (CSE)**, NIT Raipur and **The Faculty of ICT, University of Malta, Malta** on 14th and 15th Dec., 2021 virtually. The program was

inaugurated by **Dr. A. M. Rawani**, *Director, NIT Raipur* and **Prof. Ernest Cachia**, *Head, Faculty of ICT University of Malta*. **Dr. L. Garg**, *University of Malta* and **Dr. D. S. Sisodia**, *Head, CSE NIT Raipur* were the chairpersons in the conference. Secretaries of the conference were **Dr. P. Singh**, **Dr. D. Singh** and **Dr. J. K. Rout**, *Assistant Professors, CSE, NIT Raipur*. The conference proceedings will be published by **Scopus indexed Springer LNNS book series**.

International Conference on Recent Advances in Material Science and Organic Synthesis (RAMSOS-2021)

Department of Chemistry (DOC) organised International Conference on **Recent Advances in Material Science and Organic Synthesis (RAMSOS-2021)** on 20th and 21st Dec., 2021. **Dr. F. Khan**, *Professor, DOC* chaired the conference., **Dr. S.P Mahapatra** and **Dr. K. Tapadia**, *Associate Professors, DOP* and **Dr. S. Penta**, *Assistant Professor, DOC* were the secretaries of Organizing Committee. Two plenary lectures were delivered by **Prof. Kwang Pyo Kim**, *Kyung Hee University, South Korea* and **Prof. Uwe Beifuss**, *University of Hohenheim, Germany*. All the selected papers will be published in the International SCI and Scopus Indexed Journals Such as **International Journal of Materials Research, Journal of Structural Chemistry and Materials Today: Proceedings**.

National Conference on Advanced Materials

Department of Physics (DOP) organised Third National Conference on **Advanced Materials and Applications (NCAMA)** from 25th to 26th Nov., 2021. The program was inaugurated by **Dr. P. Diwan**, *Dean, Research & Consultancy, NIT Raipur*. **Dr. S. Agrawal**, *Head, DOP* chaired the conference. **Dr. A. Khare**, *Associate Professor, DOP* and **Dr. K. S. Ojha**, *Assistant Professor, DOP* were the secretaries of Organizing Committee. The keynote speakers were **Dr. J.**

Singh, Associate Professor, Department of Pure and Applied Physics, Central University, Bilaspur, CG and **Dr. J. R. Mohanty**, Associate Professor, DOP, IIT Hyderabad.



FDP on Artificial Intelligence and Machine Learning

Department of Computer Science and Engineering (CSE) organised a five-day Faculty Development Program (FDP) Sponsored by AICTE Training and Learning (ATAL) Academy on Artificial Intelligence and Machine Learning from 4th to 8th Oct., 2021. The program was coordinated by **Dr. D. S. Sisodia**, HOD, CSE.

STTP on Rural Development through Rural Infrastructure Facilities

NSS and UBA RCI, NIT Raipur organised a One-week online STTP on Rural Development through Rural Infrastructure Facilities from 22nd to 26th Nov 2021. The program was chaired by **Dr. S. Pandey**, Regional Coordinator, UBA RCI and coordinated by **Dr. G. Bhatt**, Professor In-charge, NSS. The program was inspired by the Unnat Bharat Abhiyan vision of transformational change in the rural development processes by leveraging knowledge institutions to build the architecture of an Inclusive India.

STTP on Solar PV Systems

Department of Electrical Engineering, NIT Raipur organized a Short-Term Training Program (STTP) on Solar PV Systems:

Expert Lectures Delivered by Institute Faculty/Staff

- **Dr. G. Bhatt**, Assistant Professor, Department of Civil Engineering (CE), delivered an expert lecture on the Selection of Appropriate types of Foundation for Bridge Works, Open, Raft and Pile foundations during the Online Training program for officials of PMGSY organized by RCTRC, Raipur on 16th Sep., 2021.
- **Dr. D. C. Jhariya**, Assistant Professor, DAG, delivered an expert lecture on Importance of Geological Knowledge in Groundwater Recharge Study and Remote Sensing, GIS Application in Groundwater Recharge Zone Delineation during the 5th Faculty Induction Programme organised by the UGC-Human Resource Development Centre, Doctor Harisingh Gour Vishwavidyalaya, Sagar (MP) on 20th Sep., 2021.
- **Dr. G. Bhatt**, Assistant Professor, CE, delivered an expert lecture on Introduction Earthquake Engineering: An Overview during the Recent Advances in Earthquake Engineering (RAEE-2021) organized by Civil Engineering Department, MMMUT, Gorakhpur on 20th Sep., 2021.
- **Dr. N. D. Londhe**, Associate Professor, EE, delivered an expert lecture on Fault Detection and Classification in Power System using Deep Learning during the IoT and Intelligent Techniques for Electrical Engineering (IITEE2021) organized by Maulana Azad National Institute of Technology, Bhopal on 20th Sep., 2021.
- **Dr. G. Bhatt**, Assistant Professor, CE, delivered an expert lecture on Earthquake Resistance Design of Structures during an online event on the Recent Advances in Earthquake Engineering (RAEE-2021) ATAL Series organized by Civil Engineering Department, MMMUT, Gorakhpur on 22nd Sep., 2021.
- **Dr. N. D. Londhe**, Associate Professor, EE, delivered an expert lecture on Medical Image Segmentation and Classification Using Deep Learning during the Applications of AI and ML in Power and Electronics Engineering Challenges organized by RVCE Bangalore on 22nd Sep., 2021.
- **Dr. A. Yadav**, Associate Professor, EE, delivered an expert lecture on Applications of AI And ML For Power System Protection and In Micro Grid Integrated with Renewable Energy Systems during the online workshop on Applications of AI and ML in Power and Electronics Engineering Challenges organized by Departments of EEE and ECE, RVCE Bangalore on 22nd Sep., 2021.
- **Mr. M. Tenguriya**, Assistant Professor, DOA delivered an expert lecture on Advancement in Construction Techniques of Green Building at IES University, Bhopal on 5th Oct., 2021.
- **Dr. A. Khare**, Associate Professor, DOP, delivered an expert lecture on Intellectual Property Rights for Publication of Research Articles during the Webinar on Intellectual Property Rights (IPR) organized by M J College, Bhilai, on 9th Oct., 2021.
- **Dr. S. Sthapak**, Head, DOA delivered an expert lecture on Basics of Research in

Design, Installation and Maintenance from 9th to 14th Nov., 2021. The event was coordinated by **Dr. R N Patel**, Associate Professor, EE and **Dr. B. Bag**, Assistant Professor, EE.



Online workshop on Computational Intelligence and Blockchain Technology

Department of Computer Science and Engineering (CSE) organised a five-day Online National Workshop on Computational Intelligence and Blockchain Technology (CIBT-21) from 4th-8th Oct 2021. The program was chaired by **Dr. D. S. Sisodia**, Head, CSE and coordinated by **Dr. P. Chandrakar**, and **Dr. K. J. Naik**, Assistant Professors, CSE. The workshop was inaugurated by the Chief Guest **Dr. S. Gangopadhyay**, Professor and Head, CSE, IIT Roorkee, who also delivered a lecture on Introduction to Blockchains.

Webinar on World Mental Health Day

Department of Humanities and Social Sciences organised a one-day webinar on 10th Oct., 2021, on the occasion of World Mental Health Day highlighting the importance of mental health. The webinar was coordinated by **Dr. H. Chawda**, Faculty of Value Education and Psychological Counsellor, NIT Raipur. Expert lectures were delivered by **Mr. Yogesh Shastri**, Expert in Conscious Development Value Education and **Dr. S. Bajapai**, Head, Career Development Centre (CDC), NIT Raipur.

Architecture during two-week online certificate course held at IDEAS, Nagpur, on 12th Oct., 2021.

- **Dr. G. Bhatt**, Assistant Professor, CE, delivered an expert lecture on *New Technologies in Rural Roads-Status and Research Requirements* during a five-day ATAL Faculty Development Program (FDP) on “Strategic Civil Infrastructure” organized by **Civil Engineering Department KITCOEK, Kolhapur** on 25th Oct., 2021.
- **Dr. A. Yadav**, Associate Professor, EE, delivered an expert lecture on *Wavelet Transform based Protection Schemes for Power Transmission Lines: A case study of Chhattisgarh State* during the Online webinar organized by **IEEE Power and Energy Society NIT Calicut Student Branch Chapter** on 6th Nov., 2021.
- **Dr. S. Ghosh**, Associate Professor, EE, delivered an expert lecture on *Controller Design for Fuel Cell Integrated Converters* during the ATAL FDP on Advances in Power Electronics Converters for Distributed Generation and Industrial Applications organized by **Department of Electrical Engineering, Uday Prasad Uday Government Polytechnic, Durg (CG)** on 17th Nov., 2021.
- **Dr. A. Sharaff**, Assistant Professor, CSE, delivered an expert lecture on *Natural Language Processing and Information Retrieval* during the ATAL FDP on “Deep Learning using Natural Language Processing” organized by **Bhilai Institute of Technology Durg, Chhattisgarh** from 15th to 19th Nov. 2021.
- **Dr. L. K. Sahu**, Assistant Professor, EE, delivered an expert lecture on the *Role of Power Electronics in EV Charging Station Infrastructure* during the ATAL FDP on Advances in Power Electronics Converters for Distributed Generation and Industrial Applications organized by **the Department of Electrical Engineering, Uday Prasad Uday Government Polytechnic, Durg (CG)** from 15th to 19th Nov., 2021.
- **Dr. S. L. Sinha**, Professor, ME, delivered an expert lecture on *Prospective of Alternative Fuel* during the ATAL FDP on “Sustainable Transport Sources and Future Mobility” organized by the **Energy Centre Maulana Azad NIT Bhopal (MP)** on 22nd Nov., 2021.
- **Dr. G. Bhatt**, Assistant Professor, CE, delivered an expert lecture on *Innovation and Startup movement in India and Government Schemes and Plans* during the online training course on “Atma Nirbhar Bharat - Aspects and Prospects” organized by **NITTTR Chandigarh** on 22nd Nov., 2021.
- **Dr. A. Khare**, Associate Professor, DOP, delivered an expert lecture on *Lab Conduction, Lab Maintenance and Stock Keeping* during the Non-teaching Staff

Teaching Programme-II organized by **CSVTU, Bhilai** on 27th Nov., 2021.

- **Dr. A. Khare**, Associate Professor, DOP, delivered an expert lecture on *Energy Sources and Present Scenario* during the Value-added course on Renewable Energy and Technology organized by **Pt. Shyamacharan College, Dharsiva, Raipur** on 4th Dec., 2021.
- **Dr. A. Khare**, Associate Professor, DOP, delivered an expert lecture on *Hostel Management and Related Issues* during the Non-teaching Staff Teaching Programme-III organized by **SSIPMT, Raipur**, on 8th Dec., 2021.
- **Dr. L. K. Sahu**, Assistant Professor, EE, delivered an expert lecture on *Innovation in EV and Charging Station* during the Two-Week Non-Teaching Staff Training Program-III On “Multidimensional Training of Non-Teaching Staff for Enrichment in Working Capability and Well-being” organized by **SSIPMT, Raipur** from 6th to 18th Dec., 2021.
- **Dr. A. Bandyopadhyay**, Professor, DOA delivered an expert lecture on the *Sustainability of Hindu Temples: An Interpretation Through Vedic Theology* during e-workshop on Sustainable Practices in Built Environment organized by **Department of Architecture, NIT Hamirpur** on 27th Dec., 2021.

Research Frontier

Awards, Recognition, and Fellowships

- **Dr. A. Yadav** and **Dr. S. Jain**, Associate Professors, EE, **Dr. A. Kumar**, Assistant Professor, DBT and **Dr. G. P. Gupta**, Assistant Professor, IT got nominated in the World Top 2% Scientists list by **Stanford University**.
- **Dr. A. Yadav**, Associate Professor, EE, got appointed as **Associate Editor** of the **IEEE Transactions on Power Delivery** effective from 4th Oct., 2021
- **Dr. A. Bandyopadhyay**, Professor, DOA got elected as **Fellow member(lifetime)** for the **Institute of Town Planners India (ITPI)**.

PhD Thesis Defended

- **Mr. Kamalesh Chandra Mondal** defended his PhD thesis titled *Study of Aquifer Geometry to Identify the Potential Aquifer for Sustainable Development and Management of Groundwater in and around Raipur, Chhattisgarh, India*, on 29th Oct., 2021 under the supervision of **Dr. D. C. Jhariya**, Assistant Professor, DAG.
- **Mr. M Gobinath** defended his PhD thesis titled *Groundwater Modelling Studies for Sustainable Development and Management of Groundwater Resources in and Around Bemetara Block, Chhattisgarh, India*, on 11th Nov., 2021 under the supervision of **Dr. D. C. Jhariya**, Assistant Professor, DAG.
- **Ms. Archana Yadav** defended her PhD thesis titled *Supramolecular Synthon Approach to Design, Synthesis and Physico-Chemical Analysis of Metal-Organic/Orotate Architectures Sustained by Hydrogen Bond* on 24th Nov., 2021 under the supervision of **Dr. K. A. Siddiqui**, Assistant Professor, DOC.
- **Mr. Sudhanshu Mishra** defended his PhD thesis titled *Hydrodynamics and Erosion Studies for Pneumatic Conveying* on 29th Nov., 2021 under the supervision of **Dr. S. L. Sinha**, Professor, ME, NIT Raipur, **Dr. A. N. Mullick** and **Dr. K. C. Ghanta**, Professors, NIT Durgapur (WB).
- **Mr. Devesh Baghel** defended his PhD thesis titled *Numerical Simulation of Air Flow and Heat Transfer in Infant Incubator and Warmer* on 21st Sep., 2021 under the supervision of **Dr. S. L. Sinha**, Professor, ME, **Dr. S. K. Dewangan**, Assistant Professor, ME, and **Dr. S. B. Thool**, Assistant Professor, ME, Dwarkadas J. Sanghavi College of Engineering Goregaon, Mumbai (MS).
- **Mr. Tarkeshwar Sinha** defended his PhD thesis titled *Effects of Various Parameters on the Structural, Morphological, and Optical Properties of Chemically Deposited Cadmium Sulfide (CdS) Films for Photovoltaic Applications* on 22nd Sep., 2021, under the supervision of **Dr. A. Khare**, Associate Professor, DOP.
- **Mr. Chandan Nayak** defended his PhD thesis titled *Evolutionary Optimization Based Filter Design for Biomedical Signal Processing* on 22nd Sep., 2021 under the supervision of **Dr. Suman Kumar Saha**, Assistant Professor, ECE,.
- **Mr. Saroj Kumar Pandey** defended his PhD thesis titled *Deployment and Simulation of Deep Learning Models for*

Cardiovascular Disease Diagnosis in Healthcare Systems on 18th Oct., 2021, under the supervision of **Dr. R. R. Janghel**, Assistant Professor, IT.

- **Mr. Anil Kumar Chappa** defended his PhD thesis titled *Development of Low-Cost Single-Phase Fault-Tolerant Multilevel Inverter Topology* on 12th Nov., 2021 under the supervision of **Dr. S Gupta**, Professor, EE, , **Dr. L K. Sahu**, Assistant Professor, EE, and **Dr. K K Gupta**, Associate Professor, EE, Thapar Institute.
- **Mr. Aditya Prasad Padhy** defended his PhD thesis titled *Stable Approximants for Non-Interval and Interval Systems* on 10th Dec., 2021 under the supervision of **Dr. Varsha Singh**,

Assistant Professor, EE and **Dr. V P Singh**, Assistant Professor, EE.

- **Mr. Mohit Kumar Sahu** defended his PhD thesis titled *Development and Characterization of Hybrid Aluminum Matrix Composite for Advanced Applications* on 8th Dec., 2021, under the supervision of **Dr. R. K. Sahu**, Assistant Professor, ME.
- **Mr. Kaushal Pratap Sengar** defended his PhD thesis titled *Optimum Design of Grounding Grids for HVAC Substation and a Study on Transient Behaviour of Grounding Systems* on 17th Dec., 2021, under the supervision of **Dr. K Chandrasekaran**, Assistant Professor, EE.

Students' Corner



- **Nirdesh Sharma**, 5th Sem., DBT participated in a contest called **Your Lens**, which was conducted by the **National Geographic Society**. As part of the program, his photo featured across all social media platforms of NatGeo.
- **Priyanshi Sharma**, **Sanjeeb Nath**, **Shashwat Awasthi**, 7th Sem, CSE and **Ila Chauhan**, 7th Sem, DMME are selected as **ET Campus Stars**,

2021. It is India's largest hunt for the brightest engineering minds in various engineering fields, conducted by **The Economic Times**, India.

- **Roshani Patel**, 3rd sem, DME, **Lumesh Kumar Dewangan**, 5th sem, DMME and **Krishan Agyakari Raja Babu**, 7th sem, EE received the **O. P. Jindal Engineering and Management Scholarship (OPJEMS)**, which is worth of ₹80,000 each.
- **Department of Architecture, NIT Raipur** won **Best Unit of the Event 2021 (1st Position)** in **Zonal Convention of National Association of Students of Architecture (NASA)** organised by Amity School of Architecture and Planning, Kolkata from 22nd Oct., to 24th Oct., 2021. Total 27 institutes participated in the event.

Club/Committee Activities

NCC CATC organized

NCC Combined Annual Training Camp (CATC) was organised in **NIT Raipur** by 5 CG CT (I) COY NCC Unit from 11th to 17th Nov., 2021. Both the B- and C-Certificate cadets from **NIT Raipur**, **Indira Gandhi Agricultural University (IGKV)** and **Government Nagarjuna Post Graduate College of Science** were included in this training camp. The camp was inaugurated with the opening speech by **Col. Rakesh Budhani**, which was followed by the events like weapon training, fire demonstration, rescue operation, training of traffic signs, parade formation and map reading. The camp was organised under the guidance of **Dr. S. Penta**, Professor Incharge NCC.

NCC Day



NIT Raipur celebrated the **NCC DAY** virtually on 28th Nov., 2021 by conducting multiple online events to commemorate the NCC day by cadets and staff of 5 CG CT (I) COY, Army Wing, NCC. The event was successfully organised under the guidance of **Commanding Officer Col. Rakesh Budhani**, and **Dr. S.**

Penta, Professor Incharge NCC. A blood donation camp was also organised in which 50 NCC cadets of NIT Raipur donated blood for the betterment of society and health.

NSS Day

Team NSS, NIT Raipur celebrated **NSS Day** on 24th Sep., 2021 under the guidance of **Dr. G. Bhatt**, Professor In-charge, Team NSS. The Chief Guest of the event was **Dr. P. Y. Dhekne**, Dean (Student Welfare), and **Dr. A. Khan**, Registrar, NIT Raipur was the Guest of Honour.

Poetry Writing Competition

Team NSS, NIT Raipur organised **Poetry Writing Competition** from 19th Oct. to 2nd Nov., 2021 under the guidance of **Dr. G. Bhatt**, Professor In-charge, Team NSS. **Chirag** secured 1st position, **Suyash Shukla** secured 2nd and **Aditya Pathak** secured 3rd position.

Octafest'21 Kickoff Event

IEEE Student Branch (SB), NIT Raipur, in collaboration with **IEEE Bombay Section, Technical and Professional Activities Committee (TPAC)**, organised **Octafest'21** to promote Open Source Contribution as a part of **Hacktoberfest**. It was a month-long fest scheduled from 6th Oct. to 28th Oct. 2021. **Dr. R N Patel**, Branch Counselor, IEEE SB, NIT Raipur, briefly described the agenda of the event.

The Technomic Quotient 9.0

Interact Club, NIT Raipur, organized a national level online quiz, **The Technomic Quotient 9.0**, on 6th Dec., 2021 under the guidance of **Dr. A. Khare**, Professor In-charge, Interact Club. Approximately 1000 teams participated in the quiz. The

winners were **Shantanu Sharma** and **Shashank Tyagi**, *IIM Ahmedabad*.

Green Week

Go Green Club, NIT Raipur organised a series of online competitions under the event **Green Week** from 1st Nov. to 5th Nov., 2021. The event was organised under the guidance of **Dr. D. C. Jhariya**, *Professor In-charge, Go Green Club*.

Treasure Hunt

Shaurya- the Sports Committee, NIT Raipur organised an online **Treasure Hunt** competition on the occasion of

Engineer's Day on 15th Sep., 2021. It was organised under the guidance of **Dr. R. Doriya**, *Professor In-charge, Shaurya*.

The MELA Quiz

Interact Club, NIT Raipur organized **The MELA Quiz**, the first edition of a National Level Online Quiz event, which had the prelims on 2nd Oct., 2021 and finals on 10th Oct., 2021. The event was organised under guidance of **Dr. A. Khare**, *Professor In-charge, Interact Club*.

Alumni Achievement

- **Mr. Sanjeev Saxena** (Mech/1986) has been appointed as *Director (Finance) of Defense PSU Troop Comforts Ltd. Kanpur*.
- **Mr. Jitesh Kumar Verma** (Elect/2012) secured the **12th Rank** in the state service exam, CG-PSC 2019.
- **Mr. Sanjay Dwivedi** (Mech/1986) has been appointed as *Director (Operation) of Defense PSU Armoured Vehicles Nigam Ltd, Chennai*.
- **Ms. Akanksha Nayak** (IT/2017) secured the **33rd Rank** in the state service exam, CG-PSC 2019.
- **Mr. Mukund Mitra** (Mech/ 2020) received the *Prime Minister Research Fellowship (PMRF)* for his work in the fields of *Robotics and Automation*.
- **Mr. Akash Kumar Shukla** (Mining / 2015) secured the **2nd Rank** in the state service exam, CG-PSC 2020.
- **Mr. Ashutosh Balakrishnan** (Elex/2019) received the *Prime Minister's Research Fellowship Program (PMRF)*. He is currently pursuing a Ph.D. in *Wireless*.
- **Mr. Ashutosh Dewangan** (Mining/2017) secured the **5th Rank** in the state service exam, CG-PSC 2020.
- **Mr. Piyush Tiwari** (Mining / 2017) secured the **8th Rank** in the state service exam, CG-PSC 2020.
- **Ms. Akanksha Nayak** (IT / 2017) secured the **13th Rank** in the state service exam, CG-PSC 2020.
- **Mr. Aabhas Singh Thakur** (Mining / 2015) secured the **15th Rank** in the state service exam, CG-PSC 2020.
- **Mr. Sachin Gupta** (Metallurgy / 2015) secured the **32nd Rank** in the state service exam, CG-PSC 2020.
- **Mr. Aseem Shukla** (Chemical / 2015) secured the **35th Rank** in the state service exam, CG-PSC 2020.

Contribution to the Institution

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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