

NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR



April, 2020

**VOLUME 3 ISSUE 1** 

Reflecting the True Spirit of NIT Raipur.

### **Institute News**

### **Preventive Measures @ NIT Raipur to fight COVID-19**

Currently, the world and our nation is combating to control the **novel Coronavirus Disease** (**COVID-19**) **outbreak.** No cases of COVID-19 have been reported in NIT Raipur till date. Nevertheless, even before the 21-day national lockdown came into force from 25<sup>th</sup> Mar., 2020, NIT Raipur took the following steps to prevent the spread of this global pandemic.

- On 9<sup>th</sup> Mar., 2020, Health advisory with protective measures, Do's and Don'ts to fight the Corona virus was notified to all NITRR community through e-mail, website and various social media platforms of the Institute.
- On 13<sup>th</sup> Mar., 2020, the Mid-semester break of the students was extended. All the academic activities including research, co-curricular and extra-curricular activities of UG, PG and Ph.D students in the Institute were suspended vide order dated 18<sup>th</sup> Mar., 2020 and the students residing in the hostels were asked to vacate the hostels by 19<sup>th</sup> Mar., 2020.
- All Conferences/Seminars/Workshops/STTPs and academic audits scheduled were postponed vide order dated 16<sup>th</sup> Mar., 2020. Faculty and staff members were advised not to take any travel and LTC was also forbidden from the said date.
- From 19<sup>th</sup> Mar., 2020 Canteen and other shops inside the Institute campus were immediately closed and booking of the Institute Guest House was also suspended. All the entrants to the Institute were screened by the Security personnel at entry gates, under the guidance of Institute Medical Officers.
- The Faculty members from the Department of Chemistry and Bio Medical Engineering successfully prepared preventive hand sanitizers for the Institute fraternity.
- In order to achieve social distancing, the vacational employees residing outside the campus and not bearing essential administrative responsibilities were given compulsory vacation with effect from 19<sup>th</sup> Mar., 2020. All other faculty/officers and employees of the Institute were instructed to work from home with effect from 23<sup>rd</sup> Mar., 2020.

During such times of difficulty, NIT Raipur kept the spirits high and carried out the below activities to cope with the situation:

- Dr. A. M. Rawani, *Director, NIT Raipur* appealed to the faculty and employees of the Institute to contribute their one day salary towards the PM CARES Fund to strengthen the country's disaster management capabilities and provide relief to the affected. Consequently, NIT Raipur collected and contributed a total amount of Rs. 5, 97,180/- to the PM CARES Fund.
- The faculty/officers and employees of the Institute continuing are working from home during the lockdown till 14<sup>th</sup> Apr., 2020.
- The faculty shared the lecture notes with the students, clearing their doubts, giving assignments and guiding research scholars online through e-mail etc.
- Students utilizing the MOOC courses on SWAYAM/NPTEL portals and Research Scholars working from home online through email in consultation with their Supervisors.
- After reviewing the scenario on 3<sup>rd</sup> April, it has been decided to give vacation to all students (except 8<sup>th</sup> Semester) till 31<sup>st</sup> May, 2020. Their teaching will be resumed from 1<sup>st</sup> Jun., 2020. Considering the placements of students of 8<sup>th</sup> Semester, their doubt clearing classes will be held after 30<sup>th</sup> Apr., 2020 followed by examination so that they can join the company well in time.

# **Republic Day Celebration**



NIT Raipur celebrated the 71<sup>st</sup> Republic Day of the Nation on 26<sup>th</sup> Jan., 2020. Honouring the historic day with great patriotic fervour and passion, **Dr. A. M. Rawani**, *Director*, *NIT Raipur* hoisted and unfurled the National Flag. This was followed by

the national anthem, march-past and salute marshalled by the NCC cadets of the Institute. While addressing the gathering, the Director highlighted the duties and responsibilities of the educated citizens. In his speech, he emphasized the various accomplishments of the Institute such as the accolade of the first patent, the approval for construction of a new floor in the main building, the functioning of the newly built souvenir garden, the smart water-management program, the Mentorship By Alumni (MBA) program and the Health Awareness Lesson (HeAL) program. The celebration, which was witnessed by Students, Staffs and Faculty members, was marked with the message to develop a great Institute through the collective efforts of all stakeholders.

# **Reopening of Renovated Canteen**

NIT Raipur renovated its canteen to maintain the hygienic standards, and to look student friendly and more attractive. The renovated canteen was reopened on 14<sup>th</sup> Jan., 2020 in the campus by **Dr. A. M. Rawani**, *Director*, NIT Raipur. The ceremony was graced by faculty members, staff and students of the Institute.



#### Souvenir Garden

A **Souvenir Garden**, developed in the NIT Raipur campus was opened by **Dr A. M. Rawani**, *Director*, *NIT Raipur* on the eve of Martyr's Day on 30<sup>th</sup> Jan., 2020 by planting a sapling. The Deans, Faculty, Staff and Students were present on the start of this best practice. The Souvenir Garden has been developed not only with the aim to create a green campus, but also to preserve memories by facilitating plantation of saplings given to outside guests. In case the outside guests visiting the institute are not able to carry back the sapling presented to them, such saplings are planted in the souvenir garden by them along with their name, date and program details.



#### **MoUs**

- An MOU has been signed between NIT Raipur and **UACJOFICIA**, the *Autonomous University of Ciudad Juarez, Universidad Autónoma de Ciudad Juarez (UACJ), Mexico* to enhance academic and research exchange.
- An MOU has been signed between NIT Raipur and North Carolina State University, Raleigh, North Carolina for ensuring optimal utilization of solar water pumps in rural Chhattisgarh.

# **FIRE (Free and Informal Right Expression)**

Fifth session of FIRE was held on 20<sup>th</sup> Jan., 2020 with the agenda of **'Extra Curricular Activities'.** Outcome was Extra Curricular Activities should take place in weekend and vacations.

Sixth session was held on 11<sup>th</sup> Feb., 2020 and the agenda was 'Overall Campus Life Including Canteen, Sports etc.'.

Outcome was night canteen for Girls and boys will function soon.

Seventh session was held on 5<sup>th</sup> Mar., 2020 and the agenda was '**Training Placement and Internships**'. Ways of making the internship and placement process smoother were discussed and initiated by soughting alumni help, introducing necessary subjects and engaging more firms.

### Women's Day Celebration



International Women's Day 2020 was celebrated in the Institute. A series of events including Walkathon, Quiz, Expert Lecture and Cultural Events were organised from 4<sup>th</sup> to 8<sup>th</sup> Mar., 2020. Mrs. Mumtaz Rawani was the special guest on the occasion of walkathon. An invited Lecture on 'Mental Health of Women' was delivered by Dr. Varsha Varwandkar. On this occassion NIT Raipur family also honoured the senior female faculty members for their significant contribution in the field of technical education and development of the Institute. Dr. F. Khan, Professor, Department of Chemistry, Dr. A. B. Soni, Professor, Department of Chemical Engineering, Dr. S. L. Sinha, Professor, Department of Mechanical Engineering, Dr. S. Agrawal, Professor, Department of Physics, Dr. S. Gupta, Professor, Department of Electrical Engineering and Dr. S. Sthapak, Associate Professor, Department of Architecture were felicitated with shawl and sapling as a token of gratitute.

#### **Indian Coffee House Inauguration**



**Indian Coffee House** was inaugurated at the premises of **Golden Tower** on 18<sup>th</sup> Jan., 2020. The Golden Tower building was constructed with the financial contributions and support of **Alumni Association, NIT Raipur**. The Chief Guest of the inaugural ceremony was **Dr. A. M. Rawani**, *Director*, *NIT Raipur* and the Guest of Honour was **Mr. K. D. Diwan**,

President, Alumni Association, GEC - NIT Raipur. The ceremony was witnessed by Mr. M. Chandak, Vice Secretary, Alumni Association, GEC - NIT Raipur, Mr. A. Parihar, Secretary, Alumni Association and Students of the Institute. This is currently operated under the aegis of Indian Coffee House Workers' Co-operative Society Limited, Jabalpur.

#### **Seminar on Life is Beautiful**

A two-day national seminar on **Emotional Wellness Support** was convened by **Dr. P. Diwan**, *Dean SW* and coordinated by Dr. N. Jain, Associate Dean SW, NIT Raipur to address mental health issues of students and faculty members on 23<sup>rd</sup> & 24<sup>th</sup> Jan., 2020. Dr. A. M Rawani, Director, NIT Raipur who inaugurated the seminar delivered an inspirational speech by addressing various factors and issues on the mental health of professionals. His speech was followed by lectures by **Dr. S.** Bajpai, Head, Career Development Cell and Dr. H. Chawda, Counselor, NIT Raipur. Dr. A. Varvandkar delivered an expert talk on Happiness in life and demonstrated meditation techniques. Dr. S. Parial, MBBS, MD (Psychology) and Dr. A. **Sethi**, MBBS (Counselor) also delivered the expert talks on Mental Health Problems in India. Dr. S. Verma, Dean-Academics, NIT Raipur delivered concluding remarks in the final session on Handling Exam Pressure.



### **Blood Donation**



Under the **Health Awareness Lesson (HeAL)** program announced by **Dr. A. M. Rawani**, *Director*, *NIT Raipur*, the Second HeAL Session on '**Blood Donation**' was organized on 25<sup>th</sup> Feb., 2020 for the benefit of students and employees. In this session convened by **Dr. P. Diwan**, *Dean SW* and coordinated by **Dr. N. Jain**, *Associate Dean SW*, a talk on "Blood Donation & its Importance" was delivered by **Mr. Sudeep Shrivastav**, *State Consultant and Founder Member*, *Red-Cross Blood Bank*. This session was followed by a Blood Donation Camp in the campus on 26<sup>th</sup> Feb., 2020 in collaboration with Sahyog, the Mentorship Club, NIT Raipur and the Red Cross Society. The

blood donation camp was conducted under the supervision of skilled doctors and 391 units of blood were donated.

# **Interactive session on Changing dynamics of India's foreign policies**

**Training and Placement Cell,** NIT Raipur conducted an interactive session on **Changing Dynamics of India's foreign policies** for the students and faculty members on 22<sup>nd</sup> Jan., 2020. The Guest speaker **Ambassador M. Mishra**, *I.F.S. from the Ministry of External Affairs* discussed various topics such as India as a soft-power giant & India's relations with its neighbouring countries. **Dr. A. M. Rawani**, *Director*, *NIT Raipur* felicitated the speaker with a sapling.



### **Interactive session on Fulbright Fellowships**

NIT Raipur organized an interactive session on Fulbright-Nehru and other Fulbright Fellowships for Indian Citizens on 27th Jan., 2020 under the direction of Dr. A. M. Rawani, Director, NIT Raipur and Dr. S. Bajpai, Head, Career Development Centre (CDC). It was coordinated by Dr. S. K. Mukti, Assistant Professor, DME. An expert lecture was delivered by Shri R. Pereira, Regional Officer at United States India Educational Foundation (USIEF). He discussed the scope and importance of fellowship program which is basically to maintain the quality of the Master's, Doctoral Research and Post-Doctoral Research in the United States of America.



# Special Session on Cloud and Blockchain Technology by IBM

**Department of Information Technology,** NIT Raipur in collaboration with **IBM** organized a **Special Session on Cloud and Blockchain Technology** on 28th Feb.,2020. The plenary speaker of the session was **Dr. Mani Madhukar**, *Program Manager*, *IBM*. The session was organized and coordinated by **Dr. S. P. Sahu**, *HoD*, *Department of Information Technology*(*IT*), **Dr. G. P. Gupta** and **Dr. R. Tripathi**, *Assistant Professors*, *IT*.



### Geo Milap 2.0

**Department of Applied Geology,** NIT Raipur conducted its annual alumni meet **GeoMilap 2.0** on 12<sup>th</sup> Jan., 2020 with the motive of building a strong network of Geology fraternity. The chief guest for the occasion was **Mr. H. K. Bhanjadeo**, *Retd. GM of MECON Ltd.* **Mr. Biplob Chatterjee**, *Director(consulting) and CEO of Geovale services*, was the Guest of Honor. **Dr. P. Diwan**, *HoD*, *Department of Applied Geology* addressed the gathering. **Mr. Gaurav Jangde**,

Assistant Professor, gave a presentation on Department's Evolution and Student Association's Activities.

### **Navy Awareness Drive**

An awareness drive for the Indian Navy was conducted at NIT Raipur on 10<sup>th</sup> Feb., 2020. The drive was presented by *Lieutenant Commander* Arun Rosh of the Indian Navy. He spoke in detail about various aspects and opportunities available for students to choose the careers in Indian Navy.



### **Academic Activities**

### STTP/Conference/Workshop conducted

# **National Conference on Materials Science and Applications**



A two-day National Conference on Materials Science and Applications (NCAMA-2019) was organized by the Department of Physics (DP), NIT Raipur from 21<sup>st</sup> to 22<sup>nd</sup> Dec., 2019. The conference was inaugurated by Dr. B.K. Sthapak, Ex Vice-Chancellor CSVTU, Bhilai and was presided over by Dr. S. Gupta, Dean R&C. Dr. A. Khare, Associate Professor, HoD, DP was the Chairman. Dr. B. K. Sahoo, and Dr. S.M. Saini, Associate Professors, DP organized the conference as the secretaries.

# Twinning Program: TEQIP, NIT Raipur and VEC Lakhanpur

NIT Raipur organized a **lab session** for the students of **VEC Lakhanpur** as the mentored college of the Institute under the **TEQIP-III** (*Technical Education Quality Improvement Program*) from 23<sup>rd</sup> to 30<sup>th</sup> Dec., 2019. The lab session was aimed to provide different lab training and other facilities to the students of VEC Lakhanpur. Faculty and staff members of **Mechanical Engg.**, **Civil Engg.** and **Electrical Engg.** departments provided all the tech nical assistants, instructions and teaching materials for smooth and efficient learning and

management of all the lab sessions. **Dr. S. Sanyal**, *TEQIP Coordinator*, *NIT Raipur*, distributed the certificates to students of VEC Lakhanpur, who successfully completed the program.

# **IEEE International Conference on Power, Control and Computing technologies**



The first IEEE International Conference on Power, Control and Computing technologies (ICPC2T) was organised by the Department of Electrical Engineering (DEE) from 3<sup>rd</sup> to 5<sup>th</sup> Jan., 2020. The event was chaired by Dr. A. M. Rawani, Director, NIT Raipur. Dr. R. N. Patel was the Organising Secretary. Shri S. Shukla, Chairman, CSPDCL was the Chief Guest for the conference. The keynote speakers consisted of Dr. S. Mekhilef, University of Malaya, Malaysia, Dr. A. Rathore, University of Concordia, Canada, Dr. P. Sinha, IIIT Naya Raipur. Mr. D. Bhattacharjee, Sarod Artist entertained both young and intellectual minds by his musical performance in cultural eve.

# STTP on Big Data Technologies: Python Programming and Apache Spark

A five-day STTP on **Big Data Technologies: Python Programming and Apache Spark** was conducted by the **Department of Information Technology (IT)**, NIT Raipur

from 8<sup>th</sup> to 12<sup>th</sup> Jan., 2020. **Dr. P. Diwan**, *Dean Student Welfare* was the **Chief Guest** in the program. It was organized by **Dr. G. P.Gupta**, *Assistant Professor*, *IT (Course Coordinator)*.



# STTP on Computational Intelligence and Cloud Computing

A four-day STTP on Computational Intelligence and Cloud Computing (CICC-2020) was organized by the Department of Information Technology (IT) from 13<sup>th</sup> to 17<sup>th</sup> Jan., 2020. The event was held under the guidance of Dr. R. Doria and Dr. L. Jhangel, Assistant Professors, IT.



# STTP on Application of Remote Sensing, GIS and Electrical Resistivity Techniques in Ground Water

**Department of Applied Geology (DAG)**, NIT Raipur organized STTP on **Application of Remote Sensing, GIS and Electrical Resistivity Techniques in Ground Water** from 27<sup>th</sup> to 31<sup>st</sup> Jan., 2020. **Dr. D. C. Jhariya**, *Assistant Professor, DAG* coordinated and **Dr. P. Diwan**, *DSW, NIT Raipur* convened the program. The program was inaugurated by the Guest of Honour, **Dr. S. K. Samanta**, *Regional Director, CGWB Raipur*. The valedictory session was chaired by the Chief Guest, **Mr. M. K. Singh**, *Director General*, *CGCOST*, Raipur.



#### **STTP on Robotics**

A five-day STTP on **Robotics** was organized by the **Department of Information Technology** (**IT**), NIT Raipur from 3<sup>rd</sup> to 7<sup>th</sup> Feb., 2020, which was sponsored by the **AICTE** 

**Training & Learning (ATAL).** This was coordinated by **Dr. R. Doriya**, *Assistant Professor*, *IT* and chaired by **Dr. S. P. Sahu**, *HoD*, *IT*. The program commenced with the inaugural function, which was presided by **Dr. S. Gupta**, *Dean R&C*, and **Dr. S. Sanyal**, *Professor*, *DME*.



# National Workshop on Recent Trends in Mechanical Engineering, Informatics and Management

A National Workshop on Recent Trends in Mechanical Engineering, Informatics and Management (RTMEIM), 2020 was organised from 4<sup>th</sup> to 8<sup>th</sup> Feb., 2020 by the Department of Mechanical Engineering (DME), NIT Raipur. It was convened by Dr. S. D. Patle, *Professor*, *DME*, and coordinated by Dr. S. K. Mukti, *Assistant Professor*, *DME*. The workshop was chaired by Dr. R. Salhotra, *HoD*, *DME*. Dr. Sofen Jena, *Senior Global Engineer*, *Whirlpool Asia* delivered a lecture on *Understanding the Turbulent Flow from Ab Initio*.

# STTP on Applied Mathematics using Python through Hands-on Experience

A five-day STTP on **Applied Mathematics using Python through Hands-on Experience** was conducted from 10<sup>th</sup> to 14<sup>th</sup> Feb., 2020 by **Department of Mathematics (DM),** NIT Raipur. The inaugural function was presided by **Dr. R. P. Pathak**, *Professor, DM.* **Dr. S. Vollala**, *Assistant Professor, CSE, IIIT* Naya Raipur was the chief guest. **Dr. A. K. Sinha**, *HOD*, *DM*, was the Convener of the STTP and **Dr. M. K. Prasad**, *Assisant Professor*, *DM* was the *Coordinator* of the program.



# **National Conference on Nanotechnology and Environment**

**Department of Chemical Engineering (DCE)** in collaboration with **Technical Education Quality Improvement Program** (**TEQIP**) and **Indian Chemical Society** organized a two-day **National Conference on Nanotechnology and Environment** (**NCNE**), on 13<sup>th</sup> & 14<sup>th</sup> Feb., 2020. The program was

inaugurated by **Dr. A. M. Rawani**, *Director*, *NIT Raipur*. **Dr. D. Pal**, *Conference Secretary* delivered a talk on Nanotechnology and New Paradigms covering the fields of biomedicine, electronics, energy and environment. **Dr. A. Dalai**, *the University of Saskatchewan* and **Dr. A. Verma**, *IIT*, *Delhi* delivered keynote lectures.

### **Certificate course in French Language**

Career Development Cell (CDC), NIT Raipur started a Certificate Course on French from 14<sup>th</sup> Feb., 2020 where students of the Institute can participate without any fees. The course is coordinated by Dr. S. K. Mukti, *Professor In-charge, Internal Training*. The main objective of this course is to learn the French language and culture, which will be useful for students who are seeking higher studies and jobs abroad. This will improve the employability within the country also. Avinash Sharma, *Professor*, Pandit Ravishankar Shukla University has taken the task to teach French to the students of the Institute.

# STTP on Recent Trends in Power Electronics, Power Systems and Renewable Energy Systems

A five-day STTP on Recent Trends in Power Electronics, Power Systems and Renewable Energy Systems was conducted by the Department of Electrical Engineering (EE) from 17<sup>th</sup> to 21<sup>st</sup> Feb., 2020. It was chaired by Dr. N. D. Londhe, HoD, EE and co-ordinated by Dr. Shubrata Gupta, Professor, EE and Dr. Anamika Yadav, Associate Professor, EE.



International Conference on the Role of Language, Literature and Culture in Nation Building



A two-day International Conference on the Role of Language, Literature and Culture in Nation Building (LLCN-2020) was organized by the Department of Humanities and Social Sciences (DHSS), NIT Raipur on 22<sup>nd</sup> & 23<sup>rd</sup> Feb., 2020. Prof. H. Rambukwela, Postgraduate Institute of English, the Open University, Sri Lanka delivered a keynote lecture on Literature, Nation and Nationalism: The Coproduction of Intertwined Realities. Dr. S.D. Patle, HoD,

DHSS, Dr. S. Tarai and Dr. S. Sarkar, Assistant Professors, DHSS, organized the conference and acted as secretaries.

# Futuristic Trends in Materials, Manufacturing and Mechanical Engineering

Department of Mechanical Engineering (DME), NIT Raipur and VEC Lakhanpur jointly organized a two-day National **Trends Futuristic** in Conférence on Materials, Manufacturing and Mechanical Engineering (FTMMME-2020) under the **TEQIP-III twinning program** on 28<sup>th</sup> & 29<sup>th</sup> Feb., 2020 at NIT Raipur. Dr. R. K. Sahu and Dr. S. Gangi Setti, Assistant Professors, DME, acted as organizing secretaries of the conference. Dr. A. Bhattacharjee, scientist-G, Defence Metallurgical Research Laboratory, DRDO and Dr. K. Patra, Associate Professor and Dean, IIT Patna were the keynote speakers of the conference.



# **National Conference on Challenges in Groundwater Development and Management**

A National Conference was conducted by the **Department of Applied Geology (DAG)** on **Challenges in Groundwater Development and Management (CGDAM 2020)** on 6<sup>th</sup> & 7<sup>th</sup> Mar., 2020. **Dr. M. K. Singh**, *Director General of Chhattisgarh Council of Science and Technology*, Government of Chhattisgarh was the Chief Guest in the inaugural ceremony while **Dr. S. K. Samanta**, *Regional Director*, *CGWB*, *NCCR*, *Raipur* was the Chief-guest in valedictory. **Dr. D. C. Jhariya**, *Assistant Professor*, *DAG* secretary and **Dr. P. Diwan**, *HOD*, *DAG was the* chairperson of the event.

# **Training Program on Electrical Maintenance**



**Department of Electrical Engineering (EE)**, NIT Raipur organized a five-day "**Training Program on Electrical Maintenance**" from 11<sup>th</sup> to 15<sup>th</sup> Mar., 2020. The programme provided hands-on experience of working of contactors, circuit breakers, different types of relays and E-CAD Software. **Dr. R. N. Patel**, Associate Professor, EE and **Dr. B. Bag**, Assistant Professor, EE were the coordinators of this training program. The Program was financially supported by **TEQIP-3** and NIT Raipur.

### **Expert Lectures Delivered by Eminent Researchers/Faculty/Entrepreneur**

- Alumnus Dr. M. Agrawal, Managing Director, LIROMS .delivered a lecture on Ultra Sound Sensors on 18th Dec., 2019 in the Department of Metallurgical and Materials Engineering (DMME).
- Prof. S. Y. Kulkarni, Former Professor and Head, Department of Architecture and Planning, IIT Roorkee delivered a lecture on History of Architecture on 4th Mar., 2020 in the Department of Architecture (DOA), NIT Raipur.
- Mr. M. Khan, Business Development Executive, Prolite Autoglo Limited, delivered a lecture on Emergency Exits on 5<sup>th</sup> Mar., 2020 in the Department of Architecture(DOA), NIT Raipur.
- Mr. K.L. Verma delivered a lecture on *Mineral Exploration*, on 10<sup>th</sup> Feb., 2020 in Department of Applied Geology.

# **Expert Lectures Delivered by Institute Faculty/Staff**

- Dr. A. Khare, HoD, Department of Dr. S. Tarai, Assistant Professor, DHSS Physics (DP) gave an expert lecture on Solar Photovoltaics: A Promising Source of Renewable Energy at International Conference on Sustainable Research in Engineering, Science and Management at SSIPMT, Raipur on 11th Jan., 2020.
- Dr. A. Khare, HoD, DP delivered an expert lecture on Thin Film Solar Cells: Past, Present and Future at National Seminar on Advanced Materials for Sustainable Industrial and Social Applications (NSAMSISA-2020) Govt. Pt. Shyamacharan Shukla College, Dharsiwa, Raipur on 18th Jan., 2020.
- delivered an expert lecture on Language Learning in Industrial Revolution 4.0: Challenges and Opportunities at the School of Languages and Literature, Amity University, Raipur on 31st Jan., 2020.
- Dr. A. Khare, HoD, Department of Physics gave an expert lecture on Solar Cells: Renewable Energy Source for Future at International Conference on Recent Trends in Renewable Energy and Sustainable Development (ICRTRESD-2020) at BIT Raipur on 31st Jan., 2020.
- Dr. N. Gupta, Assistant Professor, DMME has been invited as Guest of

- Honor and delivered expert lecture on Metal Foams and it's Processing in **TEQIP-III** Sponsored Short-Term Course on Advances in Materials and Processing (AMP-2020) organized by Department of Metallurgical and Materials Engineering, IGIT, Sarang, Orissa from 24th to 28th Feb., 2020.
- Dr. S. L. Sinha, Professor, DME delivered keynote lecture on New Frontiers of Energy at the National Conference on Emerging Trends & Technologies in the Area of IT, Science, Commerce and Management, which was held at Sai College, Sector 6, Bhilai, CG which took place from 26th to 27th Feb., 2020.

### **Research Frontier**

# Awards, Recognition, and Fellowships

# NIT Raipur shines in All India Inter NIT Faculty and Staff Sports Meet

• Faculty and staff members of NIT Raipur participated in All India Inter-NIT Faculty and Staff Sports Meet 2019 which was held at Malaviya National Institute of **Technology (MNIT), Jaipur** from 17<sup>th</sup> to 20<sup>th</sup> Dec., 2019. The Sports team was headed by Dr. D. C. Jharia, Assistant Professor, DAG. Mr. S. Pramanik, Assistant Professor, Department of Architecture (DOA) won the Table Tennis singles gold medal. He also won the doubles and mixed doubles-categories gold medal along with Dr. H. K. Narang, Assistant Professor, DME and Dr. N. Netam, Assistant Professor, DME respectively. Dr. H. K. Narang, Assistant Professor, DME and Dr. N. **Gupta,** Assistant Professor, DMME also won the Table Tennis women's doubles-gold medal. In badminton competition, Dr. R. Doriya, Assistant Professor, IT



secured the badminton men's singles gold medal and Ms. S. Sahu, Assistant Professor, DOA and Dr. M. Murmu, Assistant Professor, Department of Civil Engineering won the badminton doubles bronze medal.

- Dr. A. Bandyopadhyay, Professor, Department of Architecture, NIT Raipur was conferred with the Best Paper Award at the International Conference on History and Theory of Architecture at Zurich, Switzerland on 13th Jan., 2020 for his paper titled Understanding Architecture of Hindu Temples: A Philosophical Interpretation.
- Mr. S. Pramanik, Assistant Professor, Department of Architecture, NIT Raipur was awarded the Best Paper Award at the International Conference on History and Theory of Architecture at Zurich, Switzerland on 13th Jan., 2020 for his paper titled Accessibility and Visibility through Space Syntax Analysis of the Linga Raj Temple in Odisha, India.
- Dr. Shobha Lata Sinha, Professor, DME Chaired a session at the International Conference on Indian Power Station 2020, which was organized by National Thermal Power Limited, New Delhi from 13th to 14th Feb. 2020.

• **Dr. N. Gupta**, *Assistant Professor*, *DMME*, NIT Raipur has been conferred with the Outstanding Woman in Engineering Award during 5<sup>th</sup> Annual Women's Meet (AWM 2020) on 7<sup>th</sup> Mar., 2020 in Chennai, India. The 5th AWM 2020, which was convened by the Centre for Advanced Research and Design (CARD), Venus International Foundation (VIF), is dedicated to recognizing the talented woman professionals in India.

#### **PhD Thesis Defended**

- Mr. P. K. Mishra, defended his PhD thesis titled *Protection of Series Compensated Transmission Line Using Computation Intelligence Techniques* on 24<sup>th</sup> Dec., 2019. He worked under the supervision of **Dr. A.Yadav**, Associate *Professor*, *EE*
- Ms. R. Nale, defended her PhD thesis titled *Anti-Islanding Protection for AC Microgrid* on 10<sup>th</sup> Feb., 2020. He worked under the supervision of **Dr. M. Biswal**, *Assistant Professor*, *EE*
- Mr R. Mishra defended his PhD thesis titled *Hydrodynamic and Erosion Studies for Flow of Particulate Slurries* on 28<sup>th</sup> Feb., 2020. He worked under the supervision of **Dr. K. C. Ghanta, Dr A. N. Mullick**, *Professor, NIT Durgapur, WB*. And **Dr. S. L. Sinha**, *Professor, DME*, NIT Raipur.
- Mr. G. Ramarao, defended his PhD thesis titled A New Methodology for Evaluating Lighting Channel-Base-Current Function Parameters from Measured Magnetic Field and A Study on test Impulse Waveforms on 2<sup>nd</sup> Mar., 2020. He worked under the supervision of Dr. K. Chandrasekharan, Assistant Professor, EE.

### **Funded Projects**

• Department of Electrical Engineering, NIT Raipur received Fund for Improving R&D Infrastructure (FIST) amount Rs. 110 Lakhs (SR/FST/ET-1/2019/373, Dated 7th Jan. 2020) of Department of Science & Technology (DST), Ministry of Science and Technology, Govt of India. The Electrical Engineering Department of NIT Raipur is among the only 16 departments of recognised organizations selected by DST out of 218 applications in Engineering Sciences.

#### **Students' Corner**

#### **Students' Achievement**

#### **GATE 2020**

The stuents of Institute brought laurels by securing good ranks in GATE 2020. Team MIRROR congratulates them and wishes them success in future.

Name of Student	AIR	Name of Student	AIR	Name of Student	AIR
Arnob Samui (Metallurgy)	3	Vipul Bohara (Metallurgy)	7	Bhavesh Patil (Mechanical)	13
Mridul Yadav (Architecture)	19	Saurabh Chandra (Mechanical)	64	Vijay Prakash Beniwal (Electrical)	129
Vikash Agrawal (Mechanical)	182	Mrinal Dayal (Electrical)	221	Diksha Singh (Chemical)	284
Bhargav Praneeth (Electrical)	253	Tushar Sahu (Mechanical)	259	Gagandeep Singh (Mechanical)	288
Ravi Raj (Chemical)	341	Nitesh Agarwal (Electrical)	354	Surya Prakash Sahu (Chemical)	410
Gaurang Agarwal (Electrical)	472				

• Recovers, a team of three students of NIT Raipur: Nikhil Verma, Krishnendu Karmakar, and Nihal Pandey all 4th sem DCE, have invented 100% Bio-degradable Plastic by using Corn Starch. This prototype product is 100% biodegradable, reusable and pollution-free as it decomposes within one year.



- Kashish Aval, 6<sup>th</sup> sem., DME and G. Vamshi, 4<sup>th</sup> Sem, EE, received the O. P. Jindal Engineering and Management Scholarship (OPJEMS) which is worth of ₹80,000 each. Mr. Aval and Mr. Vamshi were nominated from total of 100 selected students from all over India, with 80 engineering and 20 management students.
- Arpit Agrawal and Chandan Kumar, 4th Sem., DMME under the supervision of Mr. Arunabh Meshram, presented a paper on Metallurgical Waste in the International Conference on Recycling and Management of Metallurgical Waste (MetWate-2020) at IIT-BHU on 22<sup>nd</sup> & 23<sup>rd</sup> Feb., 2020. Mr. Agrawal and Mr. Kumar won the Best Paper

Presentation Award and a Memento of Appreciation at the MetWate-2020.



• **Praveer Pandey**, 6<sup>th</sup> sem., Department of Mining Engineering, NIT Raipur has been conferred with the prestigious Scholarship **Coal Energy Division** for 2019-2020 from **SME International**. He has received a scholarship of \$1000 along with an honorary citation from the

Coal & Energy Division Luncheon on 25<sup>th</sup>Feb., 2020, during the **SME Annual Conference and Expo** in Phoenix, Arizona USA.

• Mr. Shikhar Sachan, 4<sup>th</sup> Sem., EE and Mr. Sunny Singh, 4<sup>th</sup> Sem., Department of Mining Engineering under the guidance of Interact Club won National IPSA Science Quiz Competition on 28<sup>th</sup> Feb. 2020 and received a cash prize worth of ₹21,000. The event was organized by IPS Academy, Indore.



- Ashish Sharma, 6<sup>th</sup> sem, BME has his own medical devices started innovations company. He has been selected **Student** for Global Entrepreneur Award Raipur by Chapter of Entrepreneur Organization. Mr. Sharma is also preparing a prototype to participate at national level **GSEA Global Student Entrepreneur** Award at Coimbatore, India.
- Ritika Roy, 4th Sem., M. Tech., IT presented a paper entitled Global Best Guided Crow Search Algorithm for Optimization Problems under the guidance of Dr. T. P. Sahu, Assistant Professor, IT and Dr. N. K. Nagwani, Associate Professor, CSE, at the International Conference on Advances in Systems, Control & Computing (AISCC-2020) on 27th & 28th Feb., 2020

- at MNIT Jaipur. She won the **Best Paper Award** in the conference.
- Somnath Maurya, 8th Sem., DOA, presented a paper entitled Study on thermal performance of vernacular houses of Bastar Region, Chhattisgarh in summer under the guidance of Dr. S. Sthapak, Associate Professor, DoA at the 2nd International Conference on Recent Trends in Renewable Energy and Sustainable Development 2020 on 30th & 31st Jan., 2020 at BIT Raipur. He won the Best Paper Award in the conference.
- Students of **Department of Applied Geology** participated in the GSI's (Geological Survey of India) 170th foundation day quiz competition held on 4<sup>th</sup> Mar., 2020 and bagged the **first as well as second prize**.

### **Club/Committee Activities**

#### **Codeutsava Workshop**

A two-day workshop was organized by the **Team Codeutsava**, NIT Raipur on 11<sup>th</sup> &12<sup>th</sup> Jan., 2020. **Ms. M. Kumari**, *Co-Founder*, *Prep-bytes* delivered a lecture on *the Importance of Competitive Programming*. **Mr. S. F. Shanavaz**, *Head*, *AR/VR Learning Solutions* conducted a session on *future possibilities of Augmented Reality (AR) and Virtual Reality (VR)* technologies.

### Codeutsava



The 4<sup>th</sup> Edition of **Codeutsava- Code Festival** was held at NIT Raipur on 18<sup>th</sup> & 19<sup>th</sup> Jan., 2020. **Dr. S. Verma**, *Dean*, *Academic* inaugurated the festival. Two online contests- *Breaking Code* and Codeheist were organized to make the event memorable. The main highlight of the event was the 28 hour-long Hackathon, in which all teams had to design a software on the basic problem statements. Tech Talks were also delivered by **Mr L. Chauhan**, Software Engineer, Google, and **Mr P. Wadaskar**, Founder, Vadactro Technologies.

# **TED**x

**TEDx, NIT Raipur** organized its annual TED talk on 1<sup>st</sup> Mar., 2020. The event started with the inaugural ceremony by **Dr. P. Diwan**, *Dean SW* and **Dr. S. Bajpai**, *Head*, *CDC*. Six speakers

delivered their talks in two sessions. Lt. Gen. S. Dua, Ex-General Officer, Indian Army, Mr. A. Swarup, Former Indian bureaucrat, Mr. R. S. Joshi, Writer, Photographer and Film Maker, Ms. S. Gupta, Actress, Ms. G. Saigal, Writer and Gurpreet Saluja, Entrepreneur shared their pragmatic life experiences and journey to the pinnacle of their professions.



### Go Green

#### **Pukaar**



**Go Green Club, NIT Raipur** organized 3<sup>rd</sup> edition of **Pukaar** on 25<sup>th</sup> Jan., 2020. The objective of this eco-fest was to focus on the human and nature bond interaction through various events. The chief guests of the event were **Mr Vishwesh Kumar Rao**,

Deputy CEO, CAMPA, CG Forest Department, Mr A.P. Sawant, Public Relations Officer, CECB and Mr. D. Awasthi, Superintendent Engineer, CREDA. The main attractions of the fest were the exhibitions of Eco-Innovation and Green Exhibition projects: Bunch of Fools, Lead Foundation and Nova Nature Club, which were honoured for their significant role in environmental impact under the Honour of Heroes initiative.

#### **Green Holi**

NIT Raipur celebrated the **Green-Holi Festival** on 9<sup>th</sup> Mar., 2020. **Dr. A.M. Rawani**, *Director*, *NIT Raipur*; **Dr. M. Atulkar**, *Registrar*, *NIT Raipur*; **Dr. P. Diwan**, *Dean SW*; **Dr. D. C. Jhariya**, *Professor In-Charge Go Green* and other faculty members, staffs and students participated in the festival. Using eco-friendly colours, all the dignitaries showed their respect to Mother Nature and sent the message of social harmony, brotherhood and joy.



# iQuest 7.0

Interact Club, NIT Raipur in collaboration with Sanskriti-The Cultural Committee of NIT Raipur organized I-Quest 7.0 on 22<sup>nd</sup> & 23<sup>rd</sup> Feb., 2020. Mr. A. Mundhada and Mr. A. Mishra 8<sup>th</sup> sem., DME secured 1<sup>st</sup> position in the competition. The top six podium finishers were presented with exciting goodies and mementoes. The event was coordinated by Dr. A. Khare, *Professor In-charge, Interact club*.



#### **UBA**

# **Interaction Program for Participating Institutes (PIs )**

**Regional Chapter of India (RCI)-Unnat Bharat Abhiyan (UBA), NIT Raipur** organized a one-day **Interaction Program** for Participating Institutes under Unnat Bharat Abhiyan on 24<sup>th</sup> Jan., 2020.The event was inaugurated by **Dr. A.M. Rawani**, *Director, NIT Raipur*. On this occasion, **Dr. M. Dandekar**, *Professor & Head, SGSITS Indore, Member of Subject Expert* 

Group (SEG) UBA 2.0 and Mr. P. B. Pandey, Center Manager, Reliance Securities Ltd, New Delhi delivered expert talks on U.B.A Policies Implementation on Ground Level and CSIR Funding respectively. The event ended with an interactive and fruitful panel discussion with representatives of various PIs, RCI members and special guest Dr. A. K. Tiwari, Assistant Professor, DHSS, NIT Raipur.



Tendua village visit



Students of NIT Raipur visited **Tendua** village under **Unnat Bharat Abhiyan** on 11<sup>th</sup> Jan., 2020. They served the noble cause of *imparting computer literacy and distributing textbooks*. They also conducted a house-to-house digital awareness program. This initiative was headed by **Prof. H. Bikrol**, *Chairperson*, *UBA NIT Raipur* and coordinated by **Dr. Jagdish**, *Member*, *UBA*, NIT Raipur. The village residents and local administration appreciated the awareness program.

# Uttarayan 2020



**EBSB Cell** and **Sanskriti-The Cultural Committee of NIT Raipur** celebrated *Uttarayan- The Kite Festival* under the MHRD project- **Ek Bharat Shreshtha Bharat** at NIT Raipur on 17<sup>th</sup> Jan., 2020. The event was graced by **Dr. A.M. Rawani,** *Director*, NIT Raipur, **Dr.M. Atulkar**, *Registrar* and **Dr. S. Verma**, *Dean Academics*, NIT Raipur.

#### **Cultural Committee**

#### **Eclectika**

Sanskriti-The Cultural Committee, NIT Raipur organized the annual cultural fest, Eclectika from 21<sup>st</sup> to 23<sup>rd</sup> Feb., 2020. It was based on the theme of Diversity and Dynamics of Food and had the tagline Bite into Fantasy. Various mega-events and games were held during these three days. The Mega event of comedy, known as Tafree was judged by Siddhartha Shetty, the stand-up comedian. The grand finale of the mega event Eclectika Idol was judged by PVNS Rohit, Indian Idol 9 Runner Up. Clash of Coreos, a crew dance mega event was judged by Piyush Gurbhele, 2<sup>nd</sup> runner up DID season 6.



The mega event of street play, Goonj was judged by Arvind Gaur, a veteran in Indian theatre and thought-provoking plays. The flagship event of fashion, Allure was judged by Harshali Chauhan, Miss Chhattisgarh 2017. Avirbhaav, the Battle of Bands was judged by Vinti Singh, a play-back singer. The mega event of art, Kalopsia was judged by Vijay Nishad, the teacher at Chappak Art Shala. The evening schedule of the first day of the fest involved an EDM night with D. J. Ravator, D. J. Btor-Carnivore and Sabrina Terence. On the Second Day,



**Nrityam-the Dance Club**, performed on themes of father son relation and Nritya Hopper Crew based on hip hop. The third night of Eclectika was **Bollywood Night** which brought forth the celebrity, **Darshan Raval**, a popular singer and composer from Ahmedabad, who has appeared in India's Raw Star.



#### **The Dramatics Club**

#### **Nukkad Natak**

**Abhinay-The Dramatics Club,** NIT Raipur in partnership with **Oxfam India, Raipur division**, performed a **Nukkad Natak** on the topic of *Gender Injustice* in the village *Kara, Janjgir-Champa* district on 27<sup>th</sup> Dec., 2019.

The Club performed a Nukkad Natak on 31<sup>st</sup> Jan.,2020 in the college campus to raise awareness about social issues and active participation of students in the society.



**The Club** performed a Nukkad Natak on 18<sup>th</sup> Feb., 2020 at the **18<sup>th</sup> National Book Festival** held at BTI ground, Raipur that stressed upon the *importance of talent over notions of exterior beauty*.

**The Club** performed a **Nukkad Natak** on the topic of **Women Empowerment** on 2<sup>nd</sup> Mar., 2020 at Marine Drive, Raipur.

#### Aurora 2020

**Abhinay-The Dramatics Club,** NIT Raipur participated and won first place in **Nukkad (Street Play) Competition in Aurora 2020** organized by **IIITM Gwalior** from 14<sup>th</sup> to 17<sup>th</sup> Feb., 2020. The theme of the Street Play was '**Body-Shaming**'.

#### **Robotix Club**

#### Robofest-20

**The Robotix club of NIT Raipur** organized a two-day **Robofest-20** at the Pandit Deendayal Auditorium from 29<sup>th</sup> Feb., to 1<sup>st</sup> Mar., 2020. The first day started with the **Robothon**, in which the problem statements related to the topics like *Mars rover, Automatic vending medicine robot, Non-invasive water flow motor, etc.* were displayed and exhibited across participants. On the second day of the fest, **Roboexpo** was organized to focus on future robotic technologies and its impact on the economy of India.



#### **Motorsports**

#### E-BAJA

Team IGNITRR of NIT Raipur secured 24th rank in E-Baja organised by **SAEINDIA** from 22<sup>nd</sup> to 26<sup>th</sup> Jan at *Pithampur*, Indore. Mr. P. Singhal, 5th sem. DME, qualified the Baja Aptitude Test. The team launched E-BAJA Vehicle in the Institute on 19th Feb., 2020. Dr. A. M. Rawani, Director, NIT Raipur, uncovered the vehicle for the audience. The team worked under the guidance of **Dr. S. P. S. Matharu**, *Professor*, DME and Mr. S. Vaidya, AWS, Workshop. The team was led by Captain K. Gabel, 5th sem DME and Vice-Captain H. Gupta,  $5^{th}$  sem. DME. This was the prototype vehicle of the Institute, which was a self-designed and self-manufactured electric vehicle consisting of various static and dynamic performances.



#### Swachhta Pakhwada

NIT Raipur organised Swachhata Pakhwada, Swachhata Pledge and Plugging Campaign on 16<sup>th</sup> & 17<sup>th</sup> Jan., 2020. These events were organized under the Swachh Bharat Abhiyan as per the direction of the Ministry of Human Resources and Development (MHRD), Govt. of India. The Faculty and Staff members of the Institute took oath of cleanliness under the guidance of **Dr. S. Gupta**, *Dean R&C*, and **Dr. P. Diwan**, *Dean SW* in Hindi and Gujrati under the flagship program of MHRD, Ek Bharat Shreshtha Bharat. The Plugging Campaign was organised to increase awareness about cleanliness and proper installation of dustbins inside the campus. The event was held under the guidance of Dr. P. Diwan, Dean Student Welfare, Dr. D. C. Jharia, Assistant Professor, DAG, Dr. A. K. Raghuvanshi, Assistant Professor, E&C, Dr. S. Penta, Assistant Professor, DOC, Dr. S. Kumar, Assistant Professor, IT, Dr. P. Y. Dhekne, Associate Professor, Department of Mining Engineering, Dr. S. K. Mukti, Assistant Professor, DME and Dr. D. Mishra, Assistant Professor, DM.



# **Students' Study Tour**

56 Students of 4th Sem Department of Architecture (DOA) along with Mr. S. K. Sahu and Mrs. K. Biswas, Assistant Professors, DOA went for an architectural study tour from 27th Jan. to 8th Feb., 2020. Study tour covered various cities like Chandigarh, Agra, and Jaipur. The main aim of the tour was to ensure that the students get acquainted with various aspects of architecture viz. concept, design and construction. The study tour of these cities having architectural master pieces which were exemplary examples of modernism, minimalism and grandness helped students to develop their outlook towards architecture.



#### **Contribution to the Institution**

Donate online in "NIT Raipur Donation Fund" (https://www.eduqfix.com/OnlineForms/nitrdfform/add). Donations are exempted under 80G of IT Act.

Follow us on:









