

NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

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Reflecting the True Spirit of NIT Raipur.

Institute News

Inauguration of Central Computer Centre

The Central Computer Centre (CCC) of NIT Raipur was inaugurated by Dr. A. M. Rawani, Director, NIT Raipur on 14th Feb., 2019. The aim of the CCC is to provide up-to-date professional Communication *Information* and Technology Services which can impart the high-end ICT education and promote the computational use cutting-edge technologies in the Institute. In addition, the CCC is the central unit which manages and administers the Campus-Wide Network, Computational Storage and Digital Communication Infrastructures of the Institute. The CCC comprises of four



computer laboratory classrooms and a computer laboratory. The Centre houses more than 400 desktops that will be used by the students, faculty members and staffs. On this occasion, the Honourable Director also dedicated the Language **Laboratory** of the Institute for imparting the English language training to the students. The language laboratory classes, which will be conducted by the faculty members of Humanities and Social Sciences, seek to enhance the interpersonal communication and soft skills of the students.

Diwan, Dean-Student Welfare; Dr. Shirish Verma, Dean-

Academics; Dr. P. Y. Dhekne, Registrar and other faculty

members of the Institute. The supermarket B-Mart,

which is operated by Raipur Bihan, will provide easy

access to stationary and other essentials items. Currently,

Bihan consists of 25 self-independent women groups,

each having the strength of 15-20 women workers.

Commencement of B-Mart



B-Mart, the new supermarket was inaugurated in the premises of NIT Raipur on 13th Feb., 2019. The ceremony was inaugurated in the presence

of **Dr. A. M. Rawani**, Director, NIT Raipur; **Dr. Gaurav Kumar Singh**, CEO, Zila Panchayat, Raipur, **Dr. Prabhat**

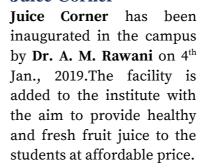
Opening of Coffee Day Beverage



Coffee Day Beverages (CDB) has started operations in the premises of the Institute for catering the daily requirements of beverages for students and employees. The facility

was inaugurated by **Dr. A. M. Rawani**, *Director*, *NIT Raipur* on 22^{nd} Feb., 2019.

Juice Corner





Tribute to our Soldiers

"Our flag does not fly because the wind moves it; it flies with the last breath of each soldier who died protecting it." Paying tribute to the brave **CRPF soldiers** who martyred in the Pulwama attack, NIT



Raipur organized a condolence candle march on 15th Feb., 2019. It was the moment of deep sorrow for the whole nation. **NIT Raipur** salutes the **Indian army** and the *brave soldiers* for their national sacrifice.

Alumni Achievement



NIT Raipur alumnus Pt. Budhaditya Mukherjee (1977/ Metallurgical Engineering) was conferred with the prestigious Padma Bhushan Award for his contribution to *Indian Classical Music* as a *Sitar Artist* and *Surbahar Maestro*. He also holds a unique distinction of being the ever *first artist* in history to perform in the **House of Commons**, London.

Faculty Achievement

• Dr. Shobha Lata Sinha and Dr. S. B. Thool published a book on *Engineering Fluid Mechanics: Theory and Practice* from Narosa Publishing House Private Limited, 22, Delhi Medical Association Road, Daryaganj, New Delhi. Dr. Shobha Lata Sinha received a certificate of Outstanding contribution in Reviewing the journal: Energy Conversion and Management, Elsevier.

• Dr. Chandrakant Thakur, Assistant Professor, Department of Chemical Engineering has been conferred with IIChE NRC Award and Sisir Kumar Mitra Memorial Award for the best technical Paper in the IIChE Journal, organised by Indian Institute of Chemical Engineers at NIT Jalandhar on 28th Dec., 2018.

MoUs with Industries/Research Labs/Institution

NDA with BALCO Korba

A Non-disclosure Agreement (NDA) has been signed between NIT Raipur and Bharat Aluminium Company Ltd. (BALCO), Korba, Chhattisgarh on 28th Jan., 2019. The main objective of the agreement is to initiate *research collaborations* and to facilitate *funding opportunities* for the

Institute. This collaborative effort will assist BALCO to establish cutting-edge technology and industry-driven research by using the engineering expertise from NIT Raipur.

MoU with Vali-e-Asr

For developing international collaboration, a **Memorandum of Understanding** (MoU) has been signed between **NIT Raipur** and **Vali-e-Asr University of Rafsanjan** (VRU) Iran on 10th Jan., 2019. This MoU aims to strengthen ties between the two Institutes, which might

lead to the establishment of partnership agreements for exchanging academic cooperation, and increasing joint and collaborative research works. Further, it will facilitate the **exchange of students** (Undergraduate, Masters and PhD) and faculty members.

MoU with NITIE Mumbai

An **MoU** has been signed between **NIT Raipur** and **NITIE** (National Institute of Industrial Engineering), Mumbai on 5th Feb., 2019, to strengthen the ties between the Institutes for *facilitating faculty* and *student exchange programs* that could increase joint and *collaborative research works*.

Further, this will create an epoch for establishing joint postgraduate programs and academic activities including short-term courses, training programmes, seminars and distance education development.

UBA-2.0

NIT Raipur has signed an MoU as Regional Coordinating Institute (RCI: consisting of 27 districts) with IIT Delhi for Unnat Bharat Abhiyan 2.0 (UBA-2.0). The Mission of UBA is to enable higher education institutions to work with the people of rural India in identifying developmental challenges and evolving appropriate solutions for

accelerating sustainable growth. Under this flagship abhiyan of MHRD, Govt. of India, **Dr. A. M. Rawani**, *Director*, *NIT Raipur* and **Dr. Sudhakar Pandey**, attended the first meeting of RCI, which was held on 6th Mar., 2019 at IIT Delhi.

MoU with National IIan University

NIT Raipur has signed an MoU with National IIan University (NIU), Taiwan to strengthen ties between two Institutes for facilitating faculty and student exchange programs. Further, it aims to widen the scope of

collaborative research and to create a new academic avenue for organising short-term courses, training programmes, seminars and conferences.

Faculty Welfare Corner

Induction Program

A one-week training program was organised for *18 newly recruited* and *2 former* faculty members of the institute by experts from **NITTTR Bhopal** during 7th-10th Jan., 2019. **Dr.** A. B. Soni (Professor and Dean Faculty Welfare) was

the convener of the program. **Dr. Amit Keshav** (Associate Dean Faculty Welfare) and **Dr. A.K. Poonia** (Associate Professor) were the coordinators of the program.

MHRD Activities

Quiz and Essay writing competition

Literati, the literary committee of NIT Raipur, in association with Ek Bharat Shrestha Bharat (A flagship event of MHRD) organised a quiz competition on 29th Mar., 2019 and an essay writing competition on 28th Feb., 2019 to explore and nourish the knowledge of the



students with the *culture*, *history*, *geography* and *economy of Gujarat*. This strengthened the fabric of existing cross-cultural bonds, promoting the spirit of national integration among the students from diverse cultural backgrounds.

Manthan

In line with the directives from **Prime Minister's Office** and Ministry **of Human Resource Development** (MHRD),



Dr. Bindeshwar Pathak, Socialist and Founder of Sulabh International Organisation delivered a leadership talk on **achieving the vision of Swachh Bharat** under New India Manthan on 7th Mar., 2019 at NIT Raipur. The talk was organised under the guidance of **Dr. A. M. Rawani**, Director, NIT Raipur and coordinated by **Dr. Suraj Kumar Mukti**. He delineated the vision of Swachh Bharat Abhiyan and its effect on developing a behavioural change in the usage of toilets. Furthermore, he shared the vision of the current Government to achieve an open-defecation free India.

Uttarayan-The Kite festival

Sanskriti, Cultural Committee of NIT Raipur organised *Uttarayan-The Kite festival* under MHRD Ek Bharat Shrestha Bharat Program at NIT Raipur on 15th Jan., 2019. The event was inaugurated by **Dr. A. M. Rawani**, Director, NIT Raipur.

India's First Leadership Talk Series



MHRD Innovation Cell, NIT Raipur organised India's First Leadership Talk Series. The first episode was conducted on 8th, 10th Jan., 2019 and the second on 24th Jan., 2019. The speaker of the first episode was, Shri Anand Mahindra, Chairman, Mahindra Group who discussed about the importance of the Innovation in Industries and Academia. The second episode was Dr. Anand Deshpande, Founder, Chairman, Managing Director of Persistent Systems Ltd. who discussed Planning for Career, Future industry trends and Startups.

Academic Activities

Lecture/Visit by Eminent Researchers/Faculty members

• **Prof. Vikas Thakur** (Alumnus, Civil Engineering /2001), Professor, Departement of Geotechnical Engineering, Norwegian University of



Science and Technology delivered an expert lecture on Landslide, Causes of Landslide, and Landslide warning system in Norway, on 27th Feb., 2019 at

NIT Raipur. He illustrated the different soil properties, its field applications and future scope in the field of geotechnical engineering.

• Prof. Anurag Mairal, Director, Global Outreach Programs, Stanford University, USA delivered a web lecture on Opportunities for Chemical Engineers in Healthcare Industry, specially in Medical Device Industry. The Web lecture was organized by Chemical Engineering Association of NIT Raipur under the supervision of Dr. Chandrakant Thakur on 18th Feb., 2019.

the • Prof. K. C. Gupta, Visiting Professor, ield CSIR-IGIB, New Delhi delivered a the guest lecture entitled Modified Natural Polysaccharides as Carriers obal for Biomolecules on 4th Feb., 2019 in the virtual classroom of NIT Raipur



Workshop/Conference/STTPs conducted

International Conference on Luminescence and Its Applications

Department of Physics, NIT Raipur in collaboration with the School of Studies in Physics and Astrophysics, Pt. Ravishankar Shukla University, Raipur and the

Department of Physics, Nagarjuna Science College, Raipur organised a four-day International Conference on Luminescence and Its Applications (ICLA-2019) from 7th Jan. to 10th Jan.,



2019. The program was inaugurated by **Shri Umesh Patel**, Honourable Minister of Higher Education, Govt. of Chhattisgarh in the gracious presence of **Prof. K. L. Verma**, Vice Chancellor, Pt. Ravishankar University, Raipur, **Dr. A. M. Rawani**, Director, NIT Raipur, **Dr. D. N.**

IEEE Workshop

The Students of Institute of Electrical and Electronics Engineers (IEEE) Branch, *NIT Raipur* in association with Google Crowdsource, conducted a two-day workshop on Machine Learning during 2nd - 3rd Feb., 2019. The session was headed by Mr. Ali Mustafa Shaikh, *Point of Contact, Google Crowdsource and Web Developer* (Python and PHP) who explained the basics of Machine Learning, Python, Tensor flow, Deep learning and NLP. He elaborated the available opportunities such as project grants, scholarship offers and sponsorships prospects offered by Google to motivate women towards learning computer

Energy Conservation Building Code 2017



BARC Seminar

NIT Raipur, in collaboration with Bhabha Atomic Research Centre (BARC), organized a one-day seminar and poster exhibition session on 25th Jan. 2019 to delineate its journey on creating a multi-disciplinary research centre for the advancement of nuclear science, engineering and other allied areas. The event was inaugurated by Dr. A. M. Rawani, Director, NIT Raipur

Verma, Principal, Govt. Science College, Raipur, Dr. K. V. R. Murthy, President, Luminescence Society of India and Prof. Marek Grinberg, Gdansk University, Poland.

Addressing the gathering, Dr. A. M. Rawani emphasised the role of NIT Raipur to impart quality science and technical education at the level of Under-graduate and Post-

graduate. He also elaborated the idea of innovation and underlined the application of basic science in Engineering. Participants from various countries: *USA*, *South Africa, Korea* and *Brazil* participated in the oral and paper presentation competitions.

programming. More than 120 students from different colleges in Chhattisgarh participated in the workshop.



A workshop on Energy Conservation Building Code 2017 (ECBC' 17) was organized in the Department of Architecture, NIT Raipur from 2nd to 3rd Feb., 2019. The ECBC' 17 was organised by Prof. Vandana Agrawal and Prof. Vivek Agnihotri, Assistant Professors in collaboration with Chhattisgarh Renewable Energy Development Agency (CREDA). Mr. J. S. Vyas, ECBC expert delivered a keynote address on the various aspects of computer simulation that could address and solve the current architectural designing issues in real time.

in the presence of **Shri R. K. Singh**, Head, Media Relations and Public Awareness Section, BARC and **Dr. Sudhir Kumar**, Scientist, BARC. The programme was coordinated by a group of faculty members headed by **Dr. Fahmida Khan**, Professor, Department of Chemistry and **Dr. Suraj Kumar Mukti**, Assistant Professor, Department of Mechanical Engg.

Arduibotics



A two-day workshop on **arduiobotics** was conducted by **Robotix Club**, *NIT Raipur* in

collaboration with Techinex, IIT BHU during 16th and 17th

Feb., 2019 at *NIT Raipur*. The event was headed by **Syed Md Asadur, Shadab Saba** and **Shoeb Ahmed**, who discussed the basic architectural algorithms of *Robots* and *Arduiobotics* using specialised kits. More than **200** students from different colleges of Chhattisgarh participated in the event.

National Conference on ESD

A One-day National Conference on Environment and Sustainable Development (ESD) was organised by the Department of Architecture, NIT Raipur on 21st Feb., 2019. Dr. Sheeba Valsson, Principal, Sree Datta Meghe

College of Architecture, Nagpur delivered the virtual keynote lecture on the Role of Environmental Education for

Enhancing Sustainable Development. Research scholars from around the country presented their papers on various topics such as Neuro-Architecture, Ecological Construction, Impact of Urban Sprawls, Importance of

Construction Materials, Social Interaction and Urban Design, Resilient Cities and Cultural Sustainability.

UDEC Workshop

Department of Mining Engineering organized two days training program *on Working of UDEC software* for faculty members and students on 7th and 8th of Jan., 2019.

IoT Workshop

A five-day workshop on the *Internet of Things (IoT)* and *Machine Learning* was conducted by the **Department of Electronics and Telecommunication**, *NIT Raipur* in collaboration with **IIIT Jabalpur** during 11th - 15th Mar., 2019. The programme was coordinated by **Dr. R. K. Chaurasiya**, **Dr. A. Naugarhiya** and **Prof. P. N. Kondekar**.

Topics like advances in machine learning and many applications of IoT, e.g. smart traffic, smart city architecture, RFID and Electronic Product Code, smart vehicles and smart health systems were discussed in the workshop.

Industry 4.0

National Industrial Contribution Cell, NIT Raipur organised a two-days workshop on the topic Industry 4.0 Transformation in association with BizM Consulting Private Limited, Pune during 16th – 17th Jan., 2019. It

developed a common understanding of Industry 4.0 by simplifying and demystifying the concepts and created a pathway towards Academic Excellence. The workshop witnessed **60** participants from a variety of disciplines.

Expert Lectures delivered by Institute Faculty



• **Dr. Neha Gupta**, Assistant Professor, Department of Metallurgical Engineering delivered an invited talk on Metal Foams: Structure, Properties and Applications and Meta materials: An Overview at O P Jindal University, Raigarh on 13th Feb., 2019.

- Dr. Ishtiyaq Ahmad, Assistant Professor, Department of Civil Engineering delivered a series of expert lectures on Basics of Geographic Information System (GIS) and Geo-tagging and use of modern IT/ GIS/ Space Technology in PMGSYroads in the Rural Connectivity **Training** and Research Centre, Atal Nagar, Raipur on 25th Jan., 2019, 29th Jan., 2019 and 27th Feb., 2019.
- Dr. D. C. Jhariya, Assistant Professor, Department of Applied Geology delivered an invited talk on:
 (i) Groundwater: A Valuable but Diminishing Resource in the occasion of 169th Foundation Day

- Celebration of *GSI*, which was organized by **Ministry of Mines**, **Geological Survey of India**, *Central Region*, Chhattisgarh, Raipur during 4th 6th Mar., 2019.
- (ii) SandMIS: An Android Based Sand Mining Monitoring Information System in the National Conference on Sand Replenishment Study on 5th Jan., 2019, which was organized by **Directorate of Geology and Mining**, Govt. of Chhattisgarh, Raipur.
- Dr. Ayush Khare, Associate Professor, Department of Physics delivered a technical talk on:
 - (i) Efficiency Enhancement in CdTe/(Cdx-Zn1-x)S Solar Cells in the **International Conference on**

Luminescence and Applications (ICLA-2019) which was organised by **Pt. Ravishankar Shukla University**, Raipur in collaboration with *Dept. of Physics*, NIT Raipur during 7th-10th Jan., 2019.

(ii) Quantum Physics: Applications from Chemistry Perspective in Govt. Kavyopadhyay Hiralal College, Abhanpur, Raipur on 16th January, 2019. (iii) Thin Film Solar Cells: Past, Present and Future in National Conference on organized by **Amity University, Raipur** during 12th - 13th Feb., 2019.

Awards and Recognition



• Ar. Debashish
Sanyal, Associate
Professor, Department of
Architecture has been
awarded the A3F Teacher
Award 2018-19 at the A3
Foundation Event, which
was held in Chandigarh
on 16th Feb., 2019.

• Dr. Tarkeshwar Sinha, Dr. Devjyoti Lilhare and Dr. Ayush Khare won 3rd prize for their poster presentation on the topic *Photoluminescence Properties of Chemical Bath Deposited CdS Films* in the *International Conference on Luminescence and Applications* (ICLA-2019) organised by *Pt. Ravishankar Shukla University, Raipur* in collaboration with *Dept. of Physics*, NIT Raipur during 7th-10th January, 2019.

Industrial Tour/Field Training Programme



- B. Tech 4th and 6th Semester students, Department of Chemical Engineering, visited the *Hiromi and Rawan units* of the *UltraTech Cement Industry* under the supervision of Dr. A. K. Poonia, Dr. Dharmpal Singh, Dr. Chandrakant Thakur and Ms. Chetna on 9th Feb., and 16th Feb., 2019 respectively.
- Geological field training programme for M.Tech (Applied Geology) 2nd Semester students was organized by the Department of Applied Geology from 31st January 2019 to21st Feb., 2019 in the Sonakhan area, Baloda Bazar, Chhattisgarh. Dr. D. C. Jhariya, Dr. Vikal Kumar Singh and Dr. Rubia imparted the training on preliminary geological inspection and mapping techniques while adopting different methods of geological survey. Both and survev mapping conducted in the areas of Negeri, Ganiyari, Bilari, Veer Narayanpur, Bhusripali etc. Students learned the basics of mapping technique

including the detail geological aspects of that area.



- Department of Architecture, NIT Raipur organized a case study of the Magneto Mall, Raipur on 30th Jan., 2019, with the support of Ar. Anand Singhania, Managing Director, Avinash Group who is an alumnus of NIT Raipur. Students along with faculty members: Prof. Himanshu Poptani, Prof. Kabita Biswas, Ar. Santosh Kumar, Ar. Arun Pandey and Ar. Uttam Bisen visited the mall with the purpose of gaining the detailed information of the spaces and services of the building.
- Dr. Ishtiyaq Ahmad, Assistant Professor, Department of Civil Engineering, organized a technical visit for the B.Tech (8th Semester) and MTech (Civil Engineering) students to help them visualize the structures of water resource system, in the Lower Jonk Barrage and Kodar Reservoir situated at Mahasamund



District on 26th Feb., 2019. The visit was accompanied by **Dr. Mohit** Jaiswal, **Dr. Meena Murmu**, **Prof.** Anurag Swarnkar and **Prof.** Sahajpreet Garewal.



• Dr. Arindam Bit. Assistant Professor, Department of Biomedical Engineering was invited by Royal Academy of Engineering to attend Frontier of Development Program at Cambridge, United Kingdom. Royal Academy had selected distinguished participants across the globe for attending this meeting. The entire trip of Dr. Bit was funded by Royal Academy of Engineers.

Research Frontiers

Recently funded projects/Consultancy

- A study on *Inventory Management at Service Facility*: PI- Dr. Sujit Kumar Samanta, Department of Mathematics, ₹13,34,600/- funded by: National Board of Higher Mathematics (NBHM), Govt. of India.
- A study on Development of Complete Functional Blood Vessel Network on Multi-layered Microfluidic Platform: PI- Dr. Arindam Bit, Department of Biomedical Engineering, and Co-PI-Dr. Lata S B Upadhyay, Department of Biotechnology, ₹49,00,000/- funded by Ministry of Human Resource Development, Govt. of India, under the Scheme for Promotion
- of Academic and Research Collaboration (SPARC). Both PI and Co-PI will work jointly with **Prof. Ali Khadeimhossien**, University of California, Los Angeles for a period of two years.
- Consultancy projects on *Scientific Study for design of Dump* as per the provision in regulation Number: 106(2) of CMR, 2017 at Chotia-II Opencast Coal Mine, worth ₹2,95,000 and *Slope Stability Study of Waste Dump* at **Aridongri Iron ore mine** belonging to **M/S Godawari Power Ispat ltd**. and its design, worth ₹5,90,000 has been received by Department of Mining Engineering.

PhD Thesis Defended

- Mr. Jaga Mohan Meher defended his PhD thesis entitled Evaluation and optimization of rheological and thermophysical properties of vegetable puree on 7th Jan., 2019 under the supervision of Dr. Amit Keshav & Dr. Bidyut Mazumdar.
- **Ms. Reecha Sahu** defended her PhD thesis entitled *Studies on isolation, partial characterization, and production of a bacterial lipase and its immobilization on glass beads for the enantio-selective synthesis of 4(R)-hydroxycyclopent-2-en-1-(S)-*
- acetate on 8th Jan., 2019 under the supervision of **Dr. Lata S B Upadhyay**.
- Ms. Shambhavi Katyayan defended her PhD thesis entitled Structural investigation and parametric analysis of rare earth activated IIA IVA and IIA IVB perovskites on 11th Feb., 2019 under the supervision of **Dr. Sadhana Agrawal**.
- Mrs. Tarkeshwari Verma defended her PhD thesis entitled

- Structural and luminescent studies of rare earth doped Y_2O_3 phosphors on 22^{nd} Feb., 2019 under the supervision of **Dr. Sadhana Agrawal**.
- Mr. Sandeep Biswal defended his PhD thesis entitled Innovation Protection Algorithms for Power Network during Critical Equipment and System Operating Conditions on 8th Feb., 2019 under the supervision of Dr. Monalisa Biswal.

NPDF

A research project titled Development of Highly Efficient Crack Sensor/indicator using Mechanoluminescent Phosphors has been approved by SERB, DST, New Delhi to Department of Physics under National Post Doctoral **Fellowship** (NPDF) scheme. **Dr. Ayush Khare** and **Dr. Piyush Jha** will respectively work as *Mentor and Post-Doctoral Fellow* (PDG) in this project.

Students' Corner

1st Position in the Griha Trophy



A team of 30 students from the **Department of Architecture**, *NIT Raipur* participated in the 61st Annual NASA Convention, which was organised by the National Association of Students of Architecture (NASA), at **SJB School of Architecture and Planning**, Bengaluru, during 19th Jan. to 23rd Jan. 2019. The students secured 1st Position in the Griha Trophy and won a cash prize of ₹75,000/-.

Hero Campus Challenge



Sakshi Singh, Shivangi Tiwari and Rohit Agarwal, Department of Information Technology, NIT Raipur secured runners up a position among 26,262 students in the Hero Campus Challenge under the Engineering category on 7th Feb., 2019. The team

received the award with a stupendous prize amount of ₹1,00,000/- and a *pre-placement* interview call from Hero MotoCorp Pvt Ltd. The recorded version of the event was broadcasted on *CNBC TV18* on 23rd and 24th Feb. 2019

Common Entrance Exam for Design (CEED)





Abhimanyu Saha and **Vivek Narang**; 10th Semester, B.Arch NIT Raipur secured All India Rank of **33** and **224** (AIR 2018) respectively, in **Common**

Entrance Exam for Design (CEED) • Mr. Vineeth Balakrishnan, research 2019. The CEED is a joint entrance exam for post-graduate studies in the field of technological design, which is annually organised by IITs and IISc. The examination is hosted by the Industrial Design Centre, Indian Institute of Technology Bombay on behalf of the Ministry of Human Resource Development, Govt. of India.

Punjabi Visions Award 2019

Chandrakar, Tamradhvaj Semester, B.Arch NIT Raipur won the coveted the Vivek Punjabi Visions Kunal Bhoge, 10^{th} Award 2019. Semester, B.Arch, NIT Raipur got a special mention as Highly Commendable entry this in competition.



Chhattisgarh Young Scientist Award

- Ms. Shraddha Chauhan, PhD Student, Department of Biotechnology won 17th **Chhattisgarh Young Scientist Award** in the field of Environmental Science Engineering and Forestry, which was held during 28th Feb. - 1st Mar., 2019.
- Abinash Sahu, Research Scholar. Department of *Applied* Geology received the Young Scientist Award,



with a cash prize of ₹21,000/- for the best paper presentation in the 17th Chhattisgarh scientist voung congress. He presented a paper entitled Petrogenesis of the ultramafic rocks from Babina greenstone belt, Anupam Karn, Dimple Sharma, R Bundelkhand Craton: A mineral chemistry approach from the Al-rich chromium spinel in the discipline of Earth and Atmospheric sciences during 28th Feb. - 1st Mar., 2019.

scholar of the mining engineering department has been awarded with **Chhattisgarh Young Scientist Award** 2019 by the Chhattisgarh Council of Science and Technology.

Aakruti



Sagarika Iyyer and Shubham Gupta 8th semester, Mechanical Engineering, secured the 2nd position in AAKRUTI 2018, organized by Solidworks Dassault Systémes. The team won ₹40,000/- cash prize and represented India in Solidworks World 2019 • Samveg Thaker, Vrihas Pathak, conference, held at Texas, USA during 10th - 13th Feb., 2019, which was fully funded by Solidworks Dassault Systémes.

Smart Hackathon challenge



Munipalle Sai Nikhila, Rajkamal Kareddula, Vinay Kornapalli, Satya Keerthi, Seelam Megha and Shiva Shankar of NIT Raipur secured 1st Position and won an amount of ₹75,000/- under the complicated problem statement category made by ezDi for a 36 hours Smart Hackathon challenge at NIT Warangal during 2nd and 3rd Mar., 2019.

Ketan Kumar, Hitesh Navak, Saurabh Pathak and Amrit Kumar of NIT Raipur secured 1st Position and won a stupendous amount of ₹75,000/-



under the complicated problem statement category, made by ISRO for hours Smart Hackathon challenge at ISRO, Ahmedabad.



Shreyansh Sahare, Kuldeep Pisda, Shreya Shrivastava and Amrita Mishra of NIT Raipur secured 1st Position and won a stupendous amount of ₹1,00,000/- under the complex problem statement category, made by Mahindra & Mahindra for a 36 hours Smart Hackathon challenge at SIRT, Bhopal during 2nd and 3rd Mar., 2019.



TATA Crucible Ouiz

Vipul Jain and Sandeep Pandey brought laurels to the Institute by securing 1st Position and winning an amount of ₹75,000/- in the TATA Crucible Quiz (Raipur Region).

INTER-NIT Sports meet

NIT Raipur gave an exuberant performance in the INTER-NIT Sports meet at NIT Rourkela, which was held during 25th – 27th Jan., 2019. The teams secured 2nd position in Men's Kabaddi, Men's Kho – Kho and Women's Kabaddi, while securing 3rd position in Women's Kho – Kho. Inspirit 2019

Vishal Nara and Poorti Jain from Department of Architecture secured runners up position in Inspirit 2019, Ramaiah Institute of Technology Bangalore on the design of the Street Furniture.

3D Printer



Gautam Kumar, Devendra Kumar Dewangan and Pratyush Kesarwani from Makerspace – Innovation Cell developed a 3D Printer under ₹20,000.

ZENITHEC

Samveg Thakur, Vrihas Pathak,
Amrita Mishra and Shreyansh
Sahare; B. Tech Computer Science and
Engineering received an incubation at
Central Computer Center (CCC) and
funding of ₹50,000 under NIT Raipur
Acceleration Grant Program for their
Startup Zenithec Techware. Zenithec
Techware is a Startup which aims to
make outsourcing and digitalization
easy for any startup or business.

PMRF



Mr. Shubhendu
Mishra, B.Tech
Mining, 2017 Batch
got selected for Prime
Minister Research
Fellowship 2018.

MPPSC

Mr. Harshal Choudhary, B.Tech Mining, 2013 Batch, has topped in Madhya Pradesh Public Service Examinations, 2018.

CGPSC

• Narendra Kumar Nishad (2014/Applied Geology), Bhoopendar Bhakt(2015/Applied Geology) and Shashi Kumar (2017/Applied Geology) secured All India Rank 1, 2 and 4 respectively in

- the CGPSC-Assistant Geologist and Mining Inspector.
- Shikhar Cherpa (2017/Applied Geology) secured an All India Rank of 4 and 6 in CGPSC-Mining Inspector and CGPSC-Assistant Geologist respectively.

UPSC

- Abhinash Sahu (2016/Applied Geology) secured an All India Rank of
 19 in the Combined Geo-Scientist and Geologist Examination, 2018 through UPSC and has been selected for the post of Geologist: (Group-Class-A).
- Raj Kishor Mohanty (2016/Applied Geology) secured an *All India Rank* of 19 in the *Combined Geo-Scientist and Geologist Examination*, 2018 through *UPSC* and has been selected for the post of **Hydrogeologist**: (Scientist-B, Group-Class-A).

Best Paper Award

Alok Sharma, Dr. Bidyut Mazumdar and Dr. Amit Keshav received the Best Paper Award entitled "Phytochemical Analysis and Antioxidant Activity of Colocasia esculenta (L.) Leaves" in 20th International Conference on Chemical Science and Technology, held on 27th – 28th Dec., 2018 in Paris, France.

GATE 2019

The students of the institute showcased their excellent performance in GATE 2019. Some of them are:

Name of Student	AIR	Name of Student	AIR
Dilpreet Dhanjal (2015/Metallurgical Engg.)	1	Ayush Tripathi (Electrical Engg.)	72
Omprakash Sahu (2018/Mining Engg.)	3	Vidisha Pagariya (Architecture)	117
Pragti Golksha (Architecture)	8	Anusha Devi (Architecture)	187
Rajat Anand (Bio Technology)	23	Anjali Agrawal (Electronics and Telecommunication)	205
Matul Bhaghel (Mining Engg.)	34	Bhanu Pratap Verma (Electrical Engg.)	276
Jitentra Kumar (Mining Engg.)	34	Anwesh Panda (Electrical Engg.)	315
Matul Baghel (Mining Engg.)	34	Vijay Prakash (Electrical Engg.)	363
Kamlesh Sahu (Mining Engg.)	44	Hirak Jyoti Baishya (Architecture)	346

Placement Report

The campus placement session witnessed the presence of **68** companies which selected **436** Undergraduate and **66** Postgraduate students with an *average CTC 7.83 LPA* and *6.21 LPA* respectively. Four B.Tech. final year students namely



Aditya Agrawal, Aman Jain, Rohit Agrawal from Department of Computer Science and Engineering and Tushar Jani from Department of Information Technology secured the highest package, worth ₹32.5 LPA by Arcesium.

Students' Activity

Cultural Committee

Eclectika



Eclectika, the cultural fest of NIT Raipur was celebrated with the theme of Vault of Nightmares. The three-day fest aimed at creating awareness about mental health. Students from over 100 colleges competed in the arena of music, dance, drama and literary. Mega-events like Goonj (the Nukkad Natak competition), Kalopsia (the painting competition), iQuest (the quiz contest), Allure (a talent competition), Clash of Choreos and War of Bands were the most famous the participants. among inaugural night was burgeoned by the performances of DJ Akade and DJ Ritwiz. The Cult night witnessed exemplary cultural performances by the students of the Institute. The yoga dance performed by the students was appreciated by Mrs. Mumtaj Rawani (wife of Dr. A. M. Rawani, Director, NIT Raipur) with cash prize of ₹21,000. The fest concluded in a musical note by renowned singer Md. Irfan and Spunk the band.

Workshop on Fight against Depression



A One-day workshop on **Fight against Depression** was organised by **Team Sanskriti**, the *Cultural Club of NIT Raipur* on 23rd Jan., 2019. **Dr. Lokesh Kumar Singh**, *Associate Professor*, *AIIMS Raipur* delineated the steps for making *mental wellness* of everyday

life and cited the various psychological, biological and environmental changes that can make people vulnerable to depression.

Uttarayan-The Kite festival

Sanskriti, Cultural Committee of NIT Raipur organised *Uttarayan-The Kite festival* under MHRD Ek Bharat Shrestha Bharat Program at NIT Raipur on 15th Jan., 2019. The event was inaugurated by **Dr. A. M. Rawani**, Director, NIT Raipur.

Go Green

Pukaar

Go Green Club, NIT Raipur organized its annual one-day Green Fest Pukaar on 16th Mar., 2019. The opening ceremony was inaugurated by Dr. **Prabhat Diwan,** Dean Student Welfare, in the presence of Dr. D. C. **Jhariya**, *Faculty in-charge* of the club. A plethora of events like Green Exhibition, Slow Cycling, Eco quiz, Best Out of Waste, Pot Making and Treasure Hunt were conducted in the program. The keynote lectures were delivered by Mr. Prafulla Samantra (Goldman Award winner in 2017) and Mr. Ramesh Agrawal (Goldman Award winner in 2014). The fest concluded with the scintillating performance of famous illusionist and mentalist Mr. Praveen Pandita.

Rajbhasha Samiti International Mother Language Day



Rajbhasha Samiti, NIT Raipur celebrated the International Mother Language Day on 21st Feb., 2019 to promote and preserve the linguistic and cultural diversity of our country through the dissemination of mother

tongues, and the awareness of regional language, literature and culture. The event was marked by the gracious presence of Dr. Prabhat Diwan, Dean Students Welfare and Dr. Shirish Verma, Dean Academics. The event sparkled with exuberant performances by Raaga, the Music Club of NIT Raipur and Abinaay, the Dramatics Club of NIT Raipur. The cultural events were followed by essay writing and debate competition on the topic Importance of Mother Tongues the Institute of National Importance.

TEDx NIT Raipur World Cancer Day



TEDx NIT Raipur chapter organised the World Cancer Day on 4th Feb., 2019 to spread awareness and empower people around the globe to fight against the disease of cancer. The social drive was initiated with a video screening of cancer-related documentary, painting and poster making-competition. The committee also organised fundraising campaign for the NGO Foundation Jeevandeep to help people suffering from this fatal disease. Students from all over the city of Raipur took part in the noble cause for combating the cancer disease.

TEDx Talk



TEDx NIT Raipur organized its annual speaker session TEDx Talk

on 9th Mar., 2019. Mr. Ankit Dwivedi, an inventive storyteller, a profound thinker and a researcher at Tata Institute of Social Science, Mumbai stressed on the importance of stories in connecting people and the great power of the story that hold in shaping our lives and humanity. Mr. Shiv Anant Tayal, Municipal Commissioner, Raipur and MD, Raipur Smart City Limited, spoke on Switching Gears for adapting to keep pace with time. Ms. Shreeradhe Khanduja, a model and actor, encouraged the audience to work hard and follow their dreams. She also touched the delicate topic of body-shaming. Major Mohammed Ali **Shah**, a retired Army Officer, theatre artist and film actor showed pride in the Indian military and discussed the topic - terrorism has no religion. Dr. Jatin Wahane, the youngest Physics researcher in Asia, explained the importance of taking the risk and being allowed to make mistakes. He illustrated that there is no welldefined way to live life and how hard work and perseverance are keys to success. The session was concluded by Mr. Saurabh Dwivedi, the founder of news website-The Lallantop, shared struggles in his life and emphasized that the formulas lies in ingenuity for a happier life.

Dance Club NRITYOTSAV 2019



Nrityam, the dance club of NIT Raipur organized the Annual Dance Fest NRITYOTSAV 2019 on 2nd Feb., 2019 under the guidance of Dr. Neha Gupta. It contained high-octane performances from different colleges in Nritya Symphony (Solo Dance competition) and Dance Eve (Group

Dance Competition), interspersed with performances by Nrityam on the theme of *Patriotism* and *Women Empowerment*.

Sahyog

Blood donation camp



Sahyog- the Mentorship Club of NIT Raipur, in association with Red Cross Blood Bank Society, Raipur organised the blood donation camp on 24th Jan. 2019. The camp set the record for the highest blood units' donation (387) at a single Institution in Chhattisgarh. Mr. Shashi Tharoor, the Hon'ble Member of Parliament; Mr. T. S. Singh Deo, the Health Minister of Chhattisgarh; Mr. Tamradhwaj Sahu, the Home Minister of Chhattisgarh and Mr. Pramod Dubey, the Mayor of Raipur Municipal Corporation encouraged the students to continue the philanthropic works and become a part of the blood donation camp drive at NIT Raipur.

Mock Placement 2.0

Sahyog - The Mentorship Club conducted Mock Placement 2.0 and Expert Talk on GATE on 7th - 8th Mar., 2019. The mock placement session was started by an aptitude test and a technical test. The shortlisted candidates were selected for Group Discussion round and the Personal Interview round which are judged by



Dance Competition), interspersed the faculty members from various with performances by Nrityam on the departments.

Interact Club

The event **i-Quest 6.0** was organised in collaboration with *Sanskriti - the cultural committee of NIT Raipur* on the occasion of **Eclectika 2019**. The aim was to give a knowledge check to the inquisitive minds attending the fest.



Codeutsava

Codeutsava, Central India's largest mega-computer science event was conducted by NIT Raipur. The event consisted of a series of workshops, tech talks and hackathons. The event was started with the workshop on Augmented and Virtual Reality, on 26th - 27th Jan., 2019, whereby students made AR-VR android application under the guidance of Pratham **Sehgal**, mentor at Innovation Cell by Facebook. The next session was addressed by Saurav Kaushik, Data Scientist at Uber and Affroz Loya, Founder of EFFCON on Data Science on 2nd Feb., 2019. Final workshop on Competitive Coding, Algorithms and System Design was rendered by Gaurav Sen, SDE 2 at Uber and Rachit Jain, Software Engineer, Microsoft on 9th - 10th Feb., 2019, who gave valuable tips for cracking company interviews and discussed smart programming basics. Arindam Paul, Sr. SDE, Amazon illustrated about Containers and its Evolution with Docker on 16th Feb., 2019, and Venkatesh Mankena, Software Engineer, ConsenSys, enunciated about Blockchain on 17th Feb., 2019. A 28-hour long hackathon was organized for helping students to get acquainted with newer technologies and IT culture, by creating a healthy competitive environment.

Mining Engg. Tech Fest,19

Department of Mining Engineering, NIT Raipur in association with *SME*,

NIT Raipur Chapter and Mining Engineering Society organised the Tech Fest'19 during 5th-6th March 2019.

Innovation Cell

Confederation of Indian Industry (CII) Innovation Club, NIT Raipur was inaugurated by Innovation Cell, NIT Raipur during the CII

Chhattisgarh State Annual Meeting on 25th Feb., 2019 under the leadership of **Prof. Sameer Bajpai.** The convener of the club is **Dr. Saurabh Gupta.** Prospective Startups of NIT Raipur were also showcased their innovations during the event.

Republic Day Celebration



The **70**th **Republic Day** was celebrated in the Institute with great zeal and patriotism. **Dr. A. M. Rawani**, *Director*, *NIT Raipur* hoisted the Tricolour flag. The Honourable Director announced many reforms for the betterment of academic *environments of the Institute*, *emphasizing* on the *enhancement of communication between students*, *faculty* and *administration*. The event concluded with a mesmerizing *cultural performance*, reflecting the *patriotic essence* of the day.

Alumni activities



• Mr. R. Madhavan (1982 / Mechanical Engineering), *CMD*, *Hindustan Aeronautics Ltd.* (HAL) visited his Alma Mater on 20th Jan.,

2019. Mr. Sanjiv Shukla (1982/Mechanical Engineering), ED, Hindustan Aeronautics Ltd. (HAL) also accompanied by him for the nostalgic visit of the Institute. The Alumni Association of GECNIT Raipur honoured the Alumni and discussed the construction of Golden Tower in the campus. Mr. Sunil Agrawal (1976/Mechanical Engineering) and Mr. U. P. Ojha (1983/Mechanical Engineering) contributed ₹1,00,000/- and ₹50,000/- respectively towards the construction of Golden Tower.

• Mr. Prakash Tiwari (1981/Mechanical Engineering), Director (Operations), NTPC Ltd. was felicitated by the Alumni Association of the Institute during his visit to the Institute on 15th Feb., 2019. The occasion witnessed the

Faculty Superannuation



After serving the Institute for more than **35** years **Dr. R. P. Pathak**, *Professor*, *Dept. of Mathematics* attained the superannuation

on $31^{\rm st}$ Dec., 2018. A farewell function was organized on $3^{\rm rd}$ Jan. 2019 and his contribution to the Institute was remembered and appreciated.



presence of Dr. A. M. Rawani, Director, NIT Raipur; Mr. Mazid Khan (1967/Chemical Engineering) Entrepreneur in New Jersey, USA; Mr. J. N. Jha (1978/ Mechanical

Engineering), CEO, CERL; Mr. K. R. C. Murthy (1979/Mechanical Engineering), MD, CSPGCL; Mr. K. D. Diwan (1981/Electrical Engineering), President, Alumni Association and Mr. Mahesh Chandak, Secretary, Alumni Association. Dr. Rawani discussed the current academic achievements, recent infrastructure developments and growth of the Institute. Mr. K. D. Diwan contributed ₹11,000/- to the institute.

• Ar. Hari Kumar (1993/Architecture), Design Manager, Dutco Construction Co., visited the Department of Architecture, NIT Raipur on 28th Jan., 2019, and shared his experiences of the various facets of the architecture profession and specific proficiency in the field.

Students' Welfare

The *drawing halls* of the Institute are now equipped with **125** new drawing boards. This will avoid the problem of carrying drawing boards by the students. Further, **6** new state of art **E-Podiums** are fixed in 6 lecture halls of different departments to add into teaching-learning process.

NIT Raipur uploaded a video featuring various amenities and facilities offered by the Institute. The video was made under the guidance of **Dr. Swasti Sthapak, Chairperson PMRC** and **Ar. Mayank Tenguriya**. Assistant Professor, Department of Architecture. The student members who contributed to videography were: Kunal Sinha (*Metallurgical Engg.* VI Sem.), Himanshu Kosharia (*Metallurgical Engg.* VIII Sem.), Yukta Sinha (*B.Arch* IV Sem.), Priyanka Baghel (*B.Arch* VIII Sem.), Aswini Kumar (*Mining Engg.* VIII Sem), Ritesh Tiwari (*B.Arch* VIII Sem.), Rajan Kumar (*B.Arch* VIII Sem.), Sayash Tripathi (*B.Tech* Metallurgical Engg. VIII Sem.), Sajal Tiwari (*B.Arch* VIII Sem.), Navya Pandey (*B.Arch* VIII Sem.), Apoorv Mishra (*Information Technology* VIII Sem.), Paridhi Mathur (*B.Arch* VIII Sem.), Diksha Kumar (*B.Arch* VIII Sem.), Jeswin Sunny Varughese (*B.Arch* VIII Sem.) and D Hruday Kumar (*B.Arch* VIII Sem.).