

VOLUME 3 ISSUE 3

NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR



Reflecting the True Spirit of NIT Raipur.



## **Institute News**

### **ARIIA Rankings 2020**

NIT Raipur has been ranked in Band 'A' (Ranks between 11-25) in Atal Ranking of Institutions on Innovation Achievements (ARIIA), 2020 by the Innovation cell, Ministry of Education, Govt. of India among Institutes of National Importance, Central Universities and Centrally Funded Institutes on 18th Aug., 2020. NIT Raipur is also amongst top 5 Institutions in the East Zone and secured the top rank among centrally funded Institutes in Chhattisgarh. This incredible ranking of the Institute is the result of constant fostering of innovation and entrepreneurial activities including periodic competitive events, mentorship of alumni and incubator ARIIA ranking, which largely focuses on networks. Innovation, Start-ups and Entrepreneurship, Intellectual Property, Technology Transfer and Commercialization, is getting a wide acceptance and recognition among Indian Higher Education Institutes as it inculcates a tech-oriented and entrepreneurial ecosystem. Under the adroit guidance of Dr. A. M. Rawani, Director, NIT Raipur all the stakeholders of the Institute have been working tenaciously in further enhancement and bolstering of the present robust innovation network and developmental of startup ecosystem.

## **Independence Day celebration**



NIT Raipur celebrated the 74<sup>th</sup> Independence Day of the Nation in the Institute campus with patriotic favour. Dr. A. M. Rawani, *Director, NIT Raipur* hoisted the tricolour national flag at the Institute Garden. Commemorating the glorious occasion amidst the unprecedented challenges of the COVID-19 pandemic, the Director addressed the faculty members, students and staff. He thanked the COVID Warriors - the essential service personnel, security officials, housekeeping staffs, medical personnel and healthcare workers, who had been physically present in the Institute throughout the pandemic. He

congratulated the faculty, students and all the stakeholders for their efforts in securing 67<sup>th</sup> position in Engineering Category by the National Institutional Ranking Framework (NIRF) in 2020. Emphasizing the Vision Document of 2020, he stressed upon various achievements of the Institute such as the development of a learning-centric approach to teaching, the recruitment of qualified, talented, motivated faculty members and staff, the establishment of good academic support facilities (Lab, Library, Internet) continuously, and the formation of industry-institute interface for collaborative research, internship and fellowship programs. He further highlighted various other adequate initiatives and steps that have been adopted by the Institute to take forward the online modes of teaching, the renovation of labs, the curriculum revision, the successful awareness programs of Entrepreneurship. Going ahead, he averred that the future goals of the Institute Vision-2030 would focus on the development of the Incubation Center and Multidisciplinary projects. The ceremony was physically attended by a few faculty members at the campus following the norms of social distancing, while other members, staffs and students witnessed the celebration through an online virtual medium, which was live-streamed on the Institute's official Social media platforms - YouTube Channel, Facebook Page and Instagram account.

#### **Coursera for Campus**

NIT Raipur has registered in the online learning platform "**Coursera for Campus**" which enables the students and faculty members to attend the online world-class education during the world-wide coronavirus outbreak. The Institute has been provided with 1050 licenses which allow access to 4000+ free courses to the registered faculty members and students. Till date, the program has 4300 enrollment and around 1100 learners have joined the program.



# Inauguration of extended premises of SBI, NIT Branch



The extended premises of SBI, NIT Branch, Raipur was inaugurated on 21<sup>st</sup> Aug., 2020 by the chief guest of the event Dr. A. M. Rawani, *Director, NIT Raipur*. Dr. M. Atulkar, *Registrar* and Dr. R. K. Tripathi, *Dean (Planning & Development), NIT Raipur* were also present in the ceremony. On this propitious occasion, Mr. P. Bharti, *DGM SBI Raipur*; Mr. R. Kumar, *Regional Manager, SBI;* Mr P. Mahapatra, *Branch Manager, SBI NIT Branch* marked their presence and demeanour by lighting a lamp.

# MoU signed between NIT Raipur and CGCOST

**National Institute of Technology, Raipur (NITRR)** and **Chhattisgarh Council of Science and Technology** (**CGCOST**) signed a Memorandum of Understanding on 4<sup>th</sup> Sep., 2020 to foster research collaboration and consultancy. This agreement will strengthen the innovative capacity and facilitate the Intellectual Property Rights by sharing a long term partnership between CGCOST and NIT Raipur.



# Host Institute (Incubation Centre) By Ministry of MSME, New Delhi

NIT Raipur has been recognized as **Host Institute (Business Incubator)** by Ministry of MSME - GoI (New Delhi) for implementation of the scheme "*Support for Entrepreneurial and Managerial Development of MSMEs through Incubator*", the final approval of which was sanctioned in Sep., 2020. During the 4<sup>th</sup> meeting of Project & Monitoring Advisory Committee (PMAC), 21 Govt. and Centrally Funded Institutions got the Final Approval as Business Incubators, out of which **NIT Raipur** was **one among the three NITs** to get the approval. Ideas selected through this scheme is now eligible for Rs. 15 Lacs of Grant amount in addition to seed funding support.

## **Opening of the New Estate Office**

NIT Raipur's New Estate Office was inaugurated on 17<sup>th</sup> Sep., 2020 by **Dr. A. M. Rawani**, *Director*, *NIT Raipur*. **Dr. M. Atulkar**, *Registrar*, **Dr. R. K. Tripathi**, *Dean (Planning & Development)* and **Dr. S. Gupta**, *Dean (Research & Consultancy)* marked their presence in the ceremony.

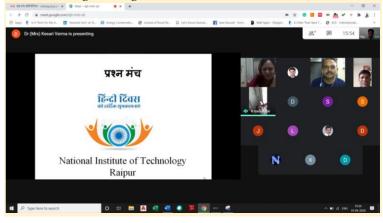


# **Establishment of Nodal Centre of IIT Bombay** to conduct Virtual Labs

NIT Raipur has been registered as a **Nodal Centre of IIT Bombay** in Sep., 2020 to conduct virtual labs. Virtual labs are web based simulation of experiments that can be performed from any location. The virtual labs are web based and students can access these from any remote location. **Dr. S. M. Saini**, *Associate Professor, Department of Physics* was nominated as **Nodal Centre Coordinator** and **Dr. P. K. Mishra**, *Assistant Professor, Department of Information Technology* was nominated as **Nodal Technical Coordinator** by **Dr. A. M. Rawani**, *Director, NIT Raipur*.

## **Hindi Week Celebration**

NIT Raipur celebrated **Rajbhasha Diwas** on 14<sup>th</sup> Sep., 2020 by organizing Hindi week from 14<sup>th</sup> to 20<sup>th</sup> Sep., 2020. Various events like Essay competition, Poetry competition, Quiz competition etc, were organized through online mode. The program was coordinated by **Dr. S. M. Saini**, *Professor Incharge, Rajabhasha Samiti* and **Dr. K. Verma**, *Associate Professor, Department of Computer Application.* The participants were judged by **Dr. S. Agarwal**, *Professor, Department of Physics*, **Dr. B. Mazumdar**, *Associate Professor* and **Dr. V. K. Singh**, *Associate Professor, Department of Chemical Engineering*.



# **Academic Activities**

# STTP/Conference/Workshop conducted HCL Training Program, NIT Raipur

**Catch Them Young**, a Training Program by *HCL Software* was held from 5<sup>th</sup> Jun., to 23<sup>rd</sup> Sep., 2020. **Mr. Prasanna**, *T&E Lead*, *HCL Software*, *Coimbatore* (*Alumnus*, 1992, *NIT Raipur*) and **Mr. A. Kumar**, *HCL Software*, delivered the lectures on internet cybersecurity and guided the entire training sessions. The training session which was organized under the supervision of **Dr. M. Chopkar**, *Faculty Incharge*, *Placement Cell*, *NIT Raipur*, aimed to create awareness, develop a talent pool in the current trending niche technology and groom students to be future experts. The program was focused on the area of Cybersecurity, Endpoint Management, Testing Automation and Develops.

International Workshop on Combating COVID-19.



Department of Information Technology (IT), NIT Raipur and Department of Chemistry, NIT Raipur organised a fiveday International online workshop on Combating COVID-19-**Responding with Resilience** from 30<sup>th</sup> Jun., 2020 to 4<sup>th</sup> Jul.,2020. This workshop was coordinated by Dr. S. Pandey, Associate Professor, IT and Dr. K. A. Siddiqui, Assistant Professor, Department of Chemistry. The participants were addressed by various experts - Mr. A. Anand, Meditationist, Prgya Trust; Dr. V. Verma, MBBS MD, Autonomous state medical college, Ayodhya; Mr. A. Shrivastava, Editor, Navodaya Times, Delhi, Mr. B. Chaturvedi, Chief Logistics Officer, OBS Green Express, New Delhi. Yogi Ashwini, Dhyan Foundation India, Dr. P. Maurya, Associate Prof., Department of Biochemistry, Central University of Haryana, Dr. K. Shukla, Pediatrician and Neonatologist and Dr. H. Kodali, CUNY Graduate School of Public Health Policy, New York. The workshop witnessed participation from USA, Australia, New Zealand, India, Spain and UK.

# Webinar on Gender Bias and Stereotyping, Gender Equality and Women's Rights

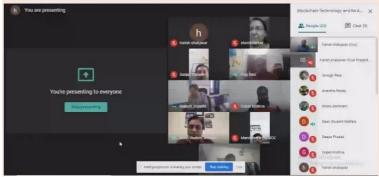
NIT Raipur organized a one day webinar on the topic *Gender Bias and Stereotyping, Gender Equality and Women's Rights* on 3<sup>rd</sup> Jul., 2020. The talks were delivered by **Sh. K. Mohan**, Former Additional Chief Secretary and FCR Haryana, National Trainer and Facilitator on Ethics and e-governance, **Dr. R. Venugopal** and **Dr. P. Srivastava**, Professors, Pt. Ravishankar Shukla University, Raipur. The program was coordinated by **Dr. A. B. Soni**, Dean faculty Welfare NIT Raipur. The online event was attended by 37 participants including female faculty, staff members and students of NIT Raipur. The webinar covered various sections related to Gender issues in the workplace, Gender Sensitization, Gender equality, gender bias and rights of women.

# **Twinning Program: TEQIP, NIT Raipur and VEC Lakhanpur**

NIT Raipur organized a lecture for the students of VEC Lakhanpur as the mentor college of the Institute under the TEQIP-III (Technical Education Quality Improvement Program) from 5<sup>th</sup> May, 2020 to 1<sup>st</sup> Aug., 2020. The lectures was delivered by **Dr. A. K. Dash**, *Assistant Professor, Department of Mining* for the subject of '**Mine climate & Ventilation**'. Approximately 45 students were benefited from this programme.

# STTP on Blockchain Technology and its Application

**Department of Information Technology (IT), NIT Raipur** organized a five-day online STTP on **Blockchain Technology** and its Application Development on Ethereum Platform from 20<sup>th</sup> to 24<sup>th</sup> Jul., 2020. The program was inaugurated by Dr. P. Diwan, Dean Student Welfare, Prof. S. Gupta, Dean R&C, Dr. S. P. Sahu, Head, IT and Dr. S. Pandey, Associate Professor, IT. The coordinators of the program were Dr. S. Kumar and Dr. R. Tripathi, Assistant Professors, IT. One of the keynote expert lectures was given by Dr. M. Madhukar, IBM India on Blockchain Technology and its potential use cases in different web applications.



## STTP on Recent Trends in Power Electronics, Power System and Renewable Energy System-II (RTPEPSRES-II-2020)

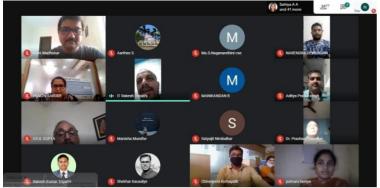
**Department of Electrical Engineering (EE), NIT Raipur** organized a five-day online STTP on **Recent Trends in Power Electronics, Power System and Renewable Energy System-II (RTPEPSRES-II-2020)** from 3<sup>rd</sup> to 7<sup>th</sup> Aug., 2020. Dr. A. M. **Rawani**, *Director, NIT Raipur* and Dr. S. Verma, *Dean*  (Academics), NIT Raipur were the Patrons of the STTP. **Dr. N. D. Londhe**, *Head*, *EE* was the Chairperson of the program. The STTP was coordinated by **Dr. S. Gupta**, *Professor*, *EE and* **Dr. A. Yadav**, *Associate Professor*, *EE*.

# Webinar on Computer-aided drug discovery against COVID-19

**Department of Biotechnology (DBE), NIT Raipur** organized a webinar on *Computer-aided Drug Discovery against COVID-*19 from 24<sup>th</sup> to 28<sup>th</sup> Aug., 2020. The webinar was convened by **Dr. P. Gupta,** *Head, DBE* and **Dr. S. Eswari,** *Assistant Professor, DBE.* The webinar highlighted the latest developments in drug design based on computational techniques using simulations, calculations and AI to identify a drug to combat the coronavirus by inhibiting the viral infection cycle.

# FDP on Blockchain Technology and Applications

**Department of Information Technology(IT)** organised **AICTE Training and Learning** sponsored FDP on **Blockchain Technology and Applications** from 14<sup>th</sup> to 18<sup>th</sup> Sep., 2020. **Dr. S. Kumar** and **Dr. R. Tripathi**, *Assistant Professors, IT* coordinated the course. The FDP aimed at providing participants with good insight into the blockchain technology and its applications. The valedictory function was presided by **Prof. H. Bikrol**, *Associate Professor, MCA*, **Dr. S. Pandey**, *Associate Professor, IT* and **Dr. S. P. Sahu**, *Head*, *IT*.



# FDP on Entrepreneurship Development and Mentorship

**Career Development Centre (CDC), NIT Raipur** organised a one-week online **Faculty Development Program** on **Entrepreneurship Development and Mentorship** from 7<sup>th</sup> to 11<sup>th</sup> Sep., 2020, which was sponsored by **TEQIP-III**. The program was conducted by the expert faculty members from **National Institute for Micro Small and Medium Enterprises** (ni-*msme*, an Organization of the Ministry of MSME, Govt. of India). In her keynote address, **Ms. S. G. Swarupa**, *Director General, ni-msme*, welcomed the initiatives taken by NIT Raipur towards training its stakeholders in entrepreneurial skills. **Mr. G. Sudarshan**, *Program Director, ni-msme* described the objective of the program and delivered an overview of various schemes of MSME, Govt. of India. **Dr. R. N. Patel**, *Faculty Incharge, E-Cell, NIT Raipur* coordinated the course and briefed about the important aspects of *National Innovation and Startup* 

*Policy (NISP).* The keynote speakers for the program also included **Dr. S. Sanyal**, *TEQIP Coordinator*, *NIT Raipur*, **Dr. S. Bajpai**, *Head*, *CDC*, *NIT Raipur and* **Dr. D. Choudhury**, *Faculty Member*, *ni-msme*.



# STTP on Recent Trends in Renewable Energy and Power System

**Department of Electrical Engineering, NIT Raipur** organized a five-day online STTP on **Recent Trends in Renewable Energy and Power System** from 20<sup>th</sup> to 24<sup>th</sup> Sep., 2020. The program was coordinated by **Dr. M. Biswal**, and **Dr. E. Koley**, Assistant Professors, EE. The speakers of the STTP included **Prof. R. C. Bansal**, University of Sharjah, UAE; **Prof. S. Chakrabarty**, IIT Kanpur; **Prof. R. Behera**, IIT Patna; **Dr. S. Samanta**, NIT Rourkela; **Dr. P. K. Nayak**, IIT Dhanbad; **Dr. Z. Rather**, IIT Bombay; **Dr. S. Sarangi**, MNNIT Prayagraj; **Dr. R. Keshri**, VNIT Nagpur; **Dr. A. R. Singh**, Shangdong University, China; **Dr. S. Das**, IISC Bangalore and other industry experts.

#### **Dr. Baldev Raj Memorial Lecture**

**Department of Metallurgical and Materials Engineering, NIT Raipur** organised the second lecture in the *Dr. Baldev Raj Memorial* series, which was conducted on 15<sup>th</sup> Sep., 2020. The lecture was delivered by **Dr. U. K. Mudali**, *Distinguished Scientist and Chairman & Chief Executive of Heavy Water Board (HWB), Department of Atomic Energy, Mumbai* on the topic **Surface Modification of Materials using Lasers**.

# FDP on Data Science with Statistical Methods using R Programming: Contribution and Developments

**Department of Mathematics (DM), NIT Raipur** conducted five days National level Faculty Development Program on **Data Science with Statistical Methods using R Programming: Contribution and Developments** from 21<sup>st</sup> to 25<sup>th</sup> Sep., 2020; sponsored by **AICTE training and Learning (ATAL) Academy. Dr. A. K. Sinha**, *Head*, *DM* and **Dr. A. K. Sharma**, *Assistant Professor, DM* were the coordinators of the Program. The FDP was inaugurated by **Dr. A. M. Rawani**, *Director, NIT Raipur*. and **Dr R. K. Jana**, *IIM Raipur* was the special guest of the occasion. **Dr. R. K. Jana**, *IIM Raipur*; **Prof. G N Singh**, *IIT ISM Dhanbad*; **Dr. D. Maheta**, *VNSGU Surat*; **Dr. S. Kaya**], *NIT Rourkela* and **Mr. S. Agrawa**], *HBTU Kanpur* were the experts who delivered important lectures related to the topic. A session on yoga and meditation was also conducted by **Mr. R. Nair**.

## **Expert Lectures delivered by Director, NIT Raipur**

- Dr. A. M. Rawani, *Director NIT Raipur* delivered an invited talk on *'COVID-19 and Education'* on the All India Radio Raipur which was broadcasted in two parts on 12<sup>th</sup> and 13<sup>th</sup> Jul., 2020 respectively.
- Dr. A. M. Rawani, *Director NIT Raipur* delivered an invited talk as a Panellist in the International Webinar on 'Envisioning the Role of Technology in Transforming Education in a rapidly Changing World' organized by the Asia One Magazine on 1<sup>st</sup> Aug., 2020.
- Dr. A. M. Rawani, *Director NIT Raipur* was interviewed by Collegedunia.com on 24<sup>th</sup> Sep., 2020 in which he put forth his thoughts on Education.

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

- Dr. D. C. Jhariya, Assistant Professor, Department of Applied Geology delivered an expert talk titled as Essentials of Groundwater Recharge organized by Axis Institute of Technology and Management, Kanpur on 11<sup>th</sup> Jun.,2020.
- Dr. S. L. Sinha, Professor, Department of Mechanical Engineering (ME) delivered an expert lecture on Impact of Lockdown due to Covid-19 on the Environment in a Webinar organized by Dr Indrajeet Singh College, Akaltara, Janjgir, Champa, C.G. on 21<sup>st</sup> Jun., 2020
- Dr. N. D. Londhe, *HoD*, *EE*, NIT Raipur delivered an expert lecture on *Medical Image Processing* in a National Webinar organized by R. C. Patel Institute of Technology, Shirpur, Maharashtra on 25<sup>th</sup> Jul., 2020
- Dr. D. Sanyal, Associate Professor, Department of Architecture (DOA), delivered an expert lecture on Building Orientation As Per Sun Path and Shadow Analysis during a Webinar organized by ISHRAE, Chennai on 27<sup>th</sup> Jul., 2020
- Dr. G. Bhatt, Assistant Professor, Department of Civil Engineering (CE) delivered an expert lecture on Resistant Earthquake Design ofStructures and Seismic Base Isolation of Structures in an STTP, which was organized by Bannari Amman Institute of Technology, Satyamangalam from 4<sup>th</sup> to 5<sup>th</sup> Aug., 2020.
- Dr. N. D. Londhe, HoD, EE delivered an expert lecture on Digital Signal & Image Processing in a Webinar organized by G. H. Raisoni University, Amravati on 17<sup>th</sup> Aug., 2020.

- Dr. G. Bhatt, Assistant Professor, CE delivered an expert lecture on Earthquake Resistant Design ofStructures and Seismic Base Isolation of Structures at the Future Trends in Earthquake **Resistant Design of** Structures-FTERDS FDP 2020, which was held in Bundelkhand Institute of Engineering & Technology, Jhansi on 18<sup>th</sup> Aug., 2020.
- Dr. G. Bhatt, Assistant Professor, CE delivered an expert lecture on Seismic Base Isolation of Structures- An overview in National Webinar under TEQIP III at Jabalpur Engineering College, MP on 19<sup>th</sup> Aug., 2020.
- Dr. G. Bhatt, Assistant Professor, CE delivered an expert lecture on Repair, Rehabilitation and Retrofitting of Structures in an STTP on Repair, Rehabilitation and Retrofitting of Structures, which was organized by Ojaswini Institute of Management and Technology, Damoh, MP on 25<sup>th</sup> Aug., 2020.
- Dr. A. Yadav, Associate Professor, EE delivered an expert lecture on Intelligent Protection Schemes for Microgrid with DGs in a Webinar organized by New Government Engineering College Raipur on 31<sup>st</sup> Aug., 2020.
- Dr. S. L. Sinha, *Professor, ME* delivered an expert lecture on *Alternative Fuels of IC Engines* in the Faculty Development Program organized by Christian College of Engineering and Technology, Bhilai, CG. on 4<sup>th</sup> Sep., 2020.
- **Dr. G. Bhatt**, Assistant Professor, CE delivered an expert lecture on Ecofriendly Ductile Cementitious Composites (EDCC)-Concrete in

*Seismic Regions* in a webinar organized by **Birla Gold Cement Ltd. Raipur** on 7<sup>th</sup> Sep., 2020.

- Dr. G. Bhatt, Assistant Professor, CE delivered an lecture expert on Earthquake Resistant Design ofStructures and Seismic Base Isolation of Structures in the faculty development program on Recent Advances in Earthquake Engineering organized by the Department of Civil Engineering, M.M.M. University of Technology, Gorakhpur on 8<sup>th</sup> Sep., 2020.
- Dr. S. L. Sinha, *Professor, ME* delivered an expert lecture on *Applying Emission Norms and Judging Appropriate Diesel Particulate Filters* in the Faculty Development Program at Christian College of Engineering and Technology, Bhilai, CG. on 10<sup>th</sup> Sep., 2020.
- Dr. A. Yadav, Associate Professor, EE delivered an expert lecture on Islanding detection schemes for distributed generation in micro-grid in the Faculty Development Program organized by New Government Engineering College Raipur on 12<sup>th</sup> Sep., 2020.
- Dr. S. K. Tarai, Assistant Professor, Department of HSS, delivered a keynote speech on Prosocial and Emotional Languages Modulate Cognition and Attention: Behavioural and Neural Signatures in Human Brain in the 1<sup>st</sup> International Webinar on Dementia and Neuroscience, which was organised by the Global Conferring Organisation, UK in association with Lincoln University College, Malaysia, from 21<sup>st</sup> to 22<sup>nd</sup> Sep., 2020.

## **Research Frontier**

### Awards, Recognition, and Fellowships

- Dr. H. Govil, Assistant Professor, Department of Applied Geology and Dr. S. Kumar, IIRS, ISRO has been appointed as a Guest Editor for a Special Issue of Elsevier Journal Advances in Space Research titled: Advances in Spaceborne SAR Remote Sensing for Characterization of Natural and Manmade Features on 15<sup>th</sup> Sep., 2020, which was supported by Committee on Space Research (COSPPAR).
- Dr. S. K.Tarai, *Department of HSS* was honoured with the *Best Keynote Award* for his outstanding presentation in the 1st International Webinar on Dementia and Neuroscience, which was organised by the Global Conferring Organisation, UK in association with Lincoln University College, Malaysia on 22<sup>nd</sup> Sep., 2020.

#### **PhD Thesis Defended**

- Mr. K Abhimanyu Kumar Patro, defended his PhD thesis titled On Development of Chaotic and Hyper-chaotic System based Secure Image Encryption Techniques on 19<sup>th</sup> Jun., 2020 under the supervision of Dr. B. Acharya, Assistant Professor, Department of Electronics and Communication Engineering.
- Ms. Lipismita Panigrahi, defended her PhD thesis titled On An Intelligent Diagnostic System for Ultrasound Images on 19<sup>th</sup> Jun., 2020 under the supervision of Dr. K. Verma, Associate Professor, Department of Computer Applications.
- Mr. Sudhanshu S. Behera defended his PhD thesis titled *Bioengineering for process optimization and quality enhancement of elephant foot yam (Amorphophallus paeoniifolius) Lactopickle* on 27<sup>th</sup> Jun., 2020 under the supervision of Dr. J. Anandkumar, Assistant Professor, Department of Chemical Engineering.
- Ms. Aparna Yadu defended her PhD thesis titled Biodegradation of Polycyclic Aromatic Hydrocarbons in Sequential Bioreactor System Using Mixed Microbial Consortiaon 30<sup>th</sup> Jun., 2020 under the supervision of Dr. A. Kumar, Assistant Professor, DBE.
- Mr. Rakesh Nandi, defended his PhD thesis titled A study on some queueing models under discrete-time Markovian arrival process and/or Markovian service process on 2<sup>nd</sup> Jul., 2020 under the supervision of Dr. S. K. Samanta, Assistant Professor, Department of Mathematics.
- Mr. Vishvanath Nandkumar Kanthe defended his PhD thesis titled Parametric Study on Partial Replacement of Cement by Fly Ash and Rice Husk Ash for Sustainable Concrete on 15<sup>th</sup> Jul.,

2020 under the supervision of **Dr. M. Murmu**, Assistant Professor, Department of Civil Engineering.

- Mr. Batul Diwan defended his PhD thesis titled *Study of Single Cell Oil production from Oleaginous Yeasts and its Application in Lipid Structuring* on 13<sup>th</sup> Jul., 2020 under the supervision of Dr. P. Gupta, *Head*, *DBE*.
- Mr. Niraj Dewangan defended his PhD thesis titled Investigations on Imparting Fault Tolerance to Emerging Multilevel Inverter Topologies on 17<sup>th</sup> Aug., 2020 under the supervision of Dr. S. Gupta, Professor, EE.
- Mr. Mohua Singh defended his PhD thesis titled *Theoretical* Studies on the Transient Behavior of Pulsed Electroluminescence of Small Molecule Fluorescent Organic Light-Emitting Diodes on 19<sup>th</sup> Aug., 2020 under the supervision of Dr. A. K. Shrivastav, Professor, Department of Physics, NIT Raipur and Dr. S. Tiwari, Professor, Pt. R.S.U. Raipur C.G.
- Mr. Phani Teja Bankupalli defended his PhD thesis titled Optimization-based Modeling and Controller Design for PEM Fuel Cell Integrated DC/DC Converter System on 22<sup>nd</sup> Aug., 2020 under the supervision of Dr. S. Ghosh, Associate Professor, EE.
- Mr. Ajit Kumar Singh defended his PhD thesis titled Modification of Quality Function Deployment and it's Application in Engineering Education Sector on 28<sup>th</sup> Aug., 2020 under the supervision of Dr. A. M. Rawani, Director & Professor, ME.
- Mr. Nishant Namdev defended his PhD thesis titled Applications Of Rough Sets In Biosciences: A Mathematical Approach under the supervision of Dr. A. K. Sinha, DM

#### **Funded Projects**

- Project titled: Detection of Data Attacks and Design of a Resistance Mechanism in Smart Grids by **Dr. S. Ghosh**, Associate Professor, *EE* and **Dr. T. K. Das**, Assistant Professor, Department of Computer Applications and **Dr. E. Koley**, Assistant Professor, *EE* has been sponsored by Interdisciplinary Cyber Physical Systems (ICPS) program of DST amounting 69.50 Lakhs.
- Project titled: Ensuring the Optimum Utilization of solar water pumps in rural Chhattisgarh by **Dr. Sachin Jain (PI)**, Associate Professor, EE **Dr. S. Ghosh (CO-PI)**, Associate Professor EE and **Dr. R N Patel(CO-PI)**, Associate Professor, EE has been sponsored by Partnership 2020: A Collaborative Priject of University of Nebraska at Omaha (UNO) and US Department of State (DOS) for 11 months amounting USD 73,162/-
- Project titled: Spatial Planning in Rural Areas (Gram Panchayat Spatial Development Plan) by Dr. D. Sanyal (PI), Associate Professor, DOA, Ms. S. Sahu, Mr. S. K. Sahu, Mr. V. Agnihotri, Mr. S. Pramanik, (PIs) Assistant Professors, DOA has been sponsored by Ministry of Panchayati Raj, Government of India amounting Rs. 5,00,000/-
- Project titled: Development of Patient-Specific Vertebral Disc Joint Impact with Multi-Components Designing Approach by **Dr. A. Bit** ,Assistant Professor, DBE was sanctioned by DST(India-Taiwan Program) amounting Rs. 28,88,580/-

### **Students' Corner**



• A startup named Gymnash was launched on 15th Aug., 2020 by Ayush Patel, 7th Sem., Department of Computer science and Engineering and his team comprising of 14 students from NIT Raipur. This is the first startup that connects fitness freaks with gyms by providing them with gym subscription after comparing the competitive prices at different gyms. It even provides a single day subscription of

a specific gym to the people who travel frequently. Gymnash presently works in Raipur, Raigarh and Bhilai with the aim of • Team Binaries, NIT Raipur won the expanding throughout the country.



• Team Cloud-9 comprising of three students: Aayush Bansal, Piyush Yadav and Pratik Tolambiva, 5<sup>th</sup> Sem. ME has secured the runner up position in National **Engineering Industries Idea Factory** 2020, which was organized by the National Bearings Company Limited (NBC), India's leading bearing manufacturer and exporter.

first prize for their selected problem statement at SIH (Smart India Hackathon) 2020, virtually organized by Govt. of India from 1<sup>st</sup> to 3<sup>rd</sup> Aug., 2020. Team Binaries consisted of Rushikesh Pupale. Shrivastava. Abhilasha Adarsh Rishikesh Vishwakarma. Vaishnav. Naveen Sundar and Sonal Suman of 5th Sem., Department of Computer Science and Engineering. They developed an android app for farmers and buyers and a web dashboard for administrators along with the delivery pipeline. They also developed a central system to monitor and alerts about send seasonal crop production.

### **Club/Committee Activities**

#### **Entrepreneurship Cell**

E-cell, NIT Raipur has launched an Open Source Project on 26<sup>th</sup> Jul., 2020 where experts can put their coding skills to test and join hands with the best coders from various fields. A video demonstration on how to contribute and become a part of this project has also been introduced in the Institute.

#### **Innovation Cell**

Strategy Jam Of START UP Markey SEED GRANT Markey Markey			
S.No.	TEAM NAME	TEAM EXECUTIVE	
1	Gymnash	Ayush Patel	
2	YieldAl	Aman Ku. Dewangan	
3	NIT Raipur 1	Yugal Kishor	
4	Cityshopclub	Yeeroj Sinha	
5	Aztecs	Aman Verma	
6	Neuronet Lab	Ishneet Singh Bhatia	
7	AgriBOT	Pratik Singh Thakur	
8	Voyage Scout	Jayant Kulharia	
9	NIT Raipur 2	Akhilesh Tiwari	
10	The Alpha Team	Yukta Sinha	
11	Team Crew	Saurabh Pandey	
12	Medinocare	Devendra Ku. Dewangan	
13	FAWN	Gautam Kumar	

Innovation cell, NIT Raipur conducted Seed Grant 2020 on 5<sup>th</sup> Sep., 2020 to award the fund for the innovations proposed by the students of the Institute and take them to the prototype stage. A sum of Rs 3,25,000/- will be granted to the 13 teams by Dr. A. M. Rawani, Director, NIT Raipur. Teams pitched their ideas in front of the panel consisting: Dr. S. Bajpai, Head of Career

Development Cell, Dr. S. Sanval, Professor, ME, Dr. R. N. Patel, Faculty Incharge, Entrepreneurship Cell, Dr. S. Ganguly, Assistant Professor, Department of Metallurgical Engineering, Dr. L. K. Sahu, Faculty Incharge, Ethics Club and Dr. S. Gupta, Faculty Incharge, Innovation Cell. The alumni of the Institute and successful entrepreneur, Ajit Deshpande also joined the program and provided some technical insights to all teams.

### Say NO to Drugs

Team NSS-NITRR organised a "Say NO to drugs" awareness initiative under the directives issued by the Ministry of Education, Govt. of India. Poster designing and quiz competitions were conducted on 5<sup>th</sup> Sep., 2020. The event was coordinated by Tapas Ranjan Behera and Raunak Kabiraj under the supervision of Dr. G. Bhatt, Faculty Incharge, NSS.



## **One Student One Tree**

Team NSS-NIT Raipur organized the event "One student one tree" on the occasion of Independence day. In this event, Students planted a sapling in the remembrance of our freedom fighters in their Home. This event was conducted between 15th to 22<sup>nd</sup> Aug., 2020 under the guidance of **Dr. G. Bhatt**, *Faculty* Incharge, NSS.

## Alumni Achievement

 NIT Raipur alumni have made the Institute proud by securing ALL India Ranks (AIR) in All Indian Civil Services Examination (CSE) 2019, which was conducted by the Union Public Service Commission for recruitment to various Civil Services of the *Government of India*, including the Indian Administrative Service (IAS).

Name of Student	AIR
Ms. Roma Srivastava (2011: Electrical Engineering)	70
Mr. Ayush Khare (2018: Metallurgical Engineering)	267
Mr. Ankit Mishra (2014: Mining Engineering)	294
Mr. Yogesh Kumar Patel (2012: Civil Engineering)	434
Mr. Arvind Meena (2015: Electronics Engineering)	676

- Mr. Anand Jain (1995: Mechanical Engineering), *IPS Director in Anti-Corruption Bureau*, *UT of Jammu & Kashmir*, has been awarded the LG's Gold Medal for his Honesty, Integrity and Meritorious Public Service for the year 2020.
- **Ms. Richa Dubey** (2018: Electrical Engineering) has been selected for PhD under *PMRF Scheme in IIT Jodhpur*.

- Mrs. Ujjawala Baghel (1981/Civil) has been appointed as Managing Director (Incharge) of *Chhattisgarh State Power Holding Co. Ltd. (CSPHCL).*
- Mr. Sanjeev Malik (1988/Civil) has been appointed as Executive Director of National Highway Infrastructure Development Corporation Ltd (NHIDCL).
- Mr. Harsh Gautam (1981/Elect) has been appointed as Managing Director of *Chhattisgarh State Power Distribution Company Ltd. (CSPDCL).*
- Mr. Dinesh Jain, IAS (1990/Civil) has been appointed as Collector of district Shajapur, M.P.
- Mr. Ved Ratan Sinha (1996/Mech) has been appointed as COO (Chief Operating Officer) of *Sukhbir Agro Energy LTD*,
- Mr. S. K. Gomasta (1984/Min) has been appointed as Director (Technical) of *Central Mine Planning and Design Institute (CMPDI)*.
- Mr. Rajesh Kumar Shrivastava (1982/Civil) has been promoted to Chief Engineer(Civil), of Chhattisgarh State Power Generation Company Ltd. (CGPGCL).

## **Forth Coming Events**

## 11<sup>th</sup> Convocation 2020

In view of the COVID-19 pandemic, the **11<sup>th</sup> Convocation** ceremony of NIT Raipur will be organized in Virtual Mode on **1<sup>st</sup> Dec.**, **2020**, following the time-to-time mandates of Central and State Government regarding prevention and control of COVID-19.

## **Foundation day Celebration**

The Foundation day of the Institute will be celebrated on the evening of 1<sup>st</sup> Dec., 2020 in Virtual Mode.

## **Contribution to the Institution**

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

