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#### **Jaypee University of Information Technology**

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Suggestions and comments may kindly be sent to suresh.kumar@juit.ac.in

International Conference

# 5th International PDGC - 2018

20 - 22 December 2018

For the last few years, the PDGC has been

serving as an international forum for researchers and practitioners interested in recent advances in the



areas of parallel, distributed and grid computing. It provides an opportunity to present and exchange advanced scientific and



technological information in hardware, software and theoretical foundation in these areas.

The 2018 Fifth International Conference on Parallel, Distributed and Grid Computing (PDGC-2018)" was organised by Department of CSE



and IT at Jaypee University of Information Technology. Waknaghat from 20 -22 December 2018. Dr. Pardeep Kumar Singh was the convener and coordinated the GDGC-2018.

PDGC-2018 is the fifth series of last four



conferences (PDGC-2010, 2012, 2014, 2016) with the IEEE. Total 462 manuscripts are received and out of it

after the successful reviews total 147 were presented during the conference. Prof. Mohd. S.Obaidat, Fellow of IEEE, from University of



Jordan, Jordan, Dr. B.K. Panigrahi, from IIT Delhi, India Prof. Jitender Kumar Chhabra, NIT Kuskshetra, India Dr.Shabana Urooj, from Gautam Buddha University, Greater Noida, India and Dr. Nagender K. Suryadevara from University of Hyderabad, India were the Keynote Speakers.



The proceedings of PDGC 2018 appeared in the proceedings published by IEEE and fully indexed by IEEE Xplore (IEEE Conference Record No. 44302).

# **Faculty Development Program**

## **Department of Civil Engineering**

14 – 19 January 2019

A six days Faculty development program on 'advances in civil engineering' was organized by the department of Civil Engineering along with CEC from 14-19th Jan, 2019. The Faculty development program (FDP) was conducted mainly for the advancement in civil engineering and to improve the performance of the civil engineering faculty members in various fields especially, in technical fields. It was conducted so that the faculty members can get more familiar and skilled in the latest technologies, helps them to find work balance by interacting with the industrial expert, and helps one to explore newer way of learning, and innovative methodology of teaching.

The program was chaired by Prof. Ashok & Gupta, HOD, CE, Dr. Rajiv Ganguli, Associate Professor as Convener and Aakash Gupta and Anirban Dhulia, Assistant Professors were coordinated the event.

The event was started with the felicitation of guest followed by few words of wisdom by Major General Rakesh Bassi, Registrar and Dean of Students. Prof. Ashok K. Gupta HOD, CE, also shared few lines highlighting the importance of conducting the program in the university. The program schedule comprised mainly of guest lecture from Prof. S.K. Singh on the topic 'Management of Coal Ash: Utilization and Disposal Effects' and various other important lectures by faculty members of department of civil engineering. On each day, the program started at 10 am in the morning till Spm in the evening with lectures by different professors on different topics stressing on the advancement in the fields of civil engineering.

The program ended with the detailed lecture by Prof. A.K. Gupta on the topic the vision for civi engineering in 2025. Lastly the day ended with the awarding of the certificates to the participants.



# Staff Development Program

#### **Spoken tutorial Cell**

11 -15 February 2019

A one week Staff Training Program on "Introduction to Computers" was held in Jaypee University of Information Technology, Waknaghat, Solan from 11 to 15 February 2019 under Spoken Tutorial initiative of MHRD from IIT Bombay. The training program was organized by Dr. Rajinder Sandhu and Mr. Prateek, Department of Computer Science & Engineering and Information Technology. Mr. Rohit, Mr. Shiv Kumar Gupta and Mr. Ashok Kistwal acted as training members and also handled the queries of non-teaching staff

during the training program. Around 17 participants from Non-Teaching Staff including Pantry Boys, Drivers, and Technicians etc were participated in this program. The program emphasized on learning basics of computers, Hardware, Browsers, using GMail, using JUIT Webkiosk and Google Drive etc. An online test based on the training and hands-on was conducted on last day of the program. Twelve participants were cleared the online test and received the certificates.









Latest EDA Tools for Electronic Circuit Design: Xilinx Vivado, T-SPICE

31 October – 1 November 2018

The of Electronics Department and Communication Engineering organized a 2-day workshop on "Latest EDA Tools for Electronic Circuit Design: Xilinx Vivado, T-SPICE". The program was scheduled from October 31 -November 01, 2018 in CL1 at Jaypee University of Information Technology, Waknaghat, Solan, H.P in collaboration with CoreEL Technologies, Delhi. CoreEL is a leading systems design, FPGA Core and Design services company, located in Bangalore, India's Silicon Valley. They are a pioneer among the Indian companies that envisaged the concept of IP cores and made it a successful business proposition. CoreEL is associated with Xilinx as a distributor for over

twenty years, from 1993 onwards and has the credit of popularizing Xilinx FPGA technology in India.

Dr. Shruti Jain and Dr. Harsh Sohal were the Convener of the program. The program was started with the welcome speech by Prof. M. J. Nigam, HOD, ECE. Thereafter Mr. Paramhans and Mr. Ankur discussed on various latest versions available in Xilinx and SPICE. First-day Hands-on session on Vivado was done and on the second-day, hands-on session on SPICE was conducted. More than 30 faculty members, staff & 15 Research scholars have participated in this workshop.











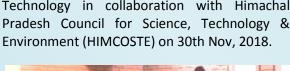
### **Patent Filing and Geographical Indications of Himachal Pradesh**

30 November 2018

IPR Cell organized a one day workshop on "PATENT FILING AND **GEOGRAPHICAL** INDICATIONS OF HIMACHAL PRADESH" in Jaypee University of Information



Technology in collaboration with Himachal Pradesh Council for Science, Technology &







The objectives of the workshop were:

- To impart the knowledge about Patent Filing Procedures in India.
- Identification and Filing of application for possible Geographical Indications of Himachal Pradesh (H.P.).

Ms. Raj LathaKotni, Lexpert, Advocates & Legal Consultants and Mr. Shashi Dhar, Ms. Ritika Kanwar along with Mr. ankush Sharma from Himachal Pradesh Patent Information Centre Shimla (H.P.) were the key experts in the workshop.



total, 90 participants (Faculty, Ph.D. scholar's, B.Tech students) from the university have attended the workshop. The workshop was

coordinated by Prof. (Dr.) Sudhir Kumar, Professor, Department of BT/BI, Dr. Shruti Jain, Associate Professor, Department of ECE and Dr.







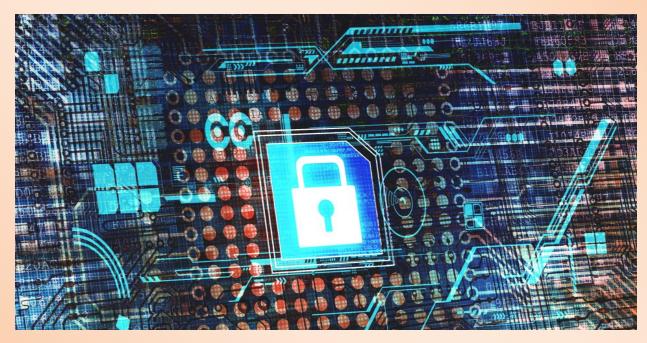
Pardeep Singh, Assistant Professor, Department of CSE/IT.

## **Standard based Coding Practices**

7 December 2018

Department of Computer Science and Engineering organized one day workshop on Standards based Coding Practices. This workshop was scheduled on 7th December 2018 and officials from LDRA Mr. Himalaya Bansal and his technical team presented the talk. Basic Idea of talk was to focus on coding using some international standard such as **CERT-C and MISRA.** 

Dr. Rajinder Sandhu was the coordinator of the program. Talk started with a welcome speech from Head of Department Prof. (Dr.) Satya Prakash Ghrera. More than 25 faculty and staff members attended the workshop.







MATLAB 2018b and recent toolbox add-ons 10 January 2019

Department of Electronics and Communication Engineering organized a workshop on "MATLAB 2018b and Recent toolbox add-ons". The program was scheduled on January 10, 2019 at Department of Electronics and Communication Engineering, Jaypee University of Information Technology, Waknaghat, Solan, H.P.

Dr. Shruti Jain and Dr. Nishant Jain were the Coordinators of the program. Mr. Mahmooduz Zafar and Mr. Kaleem Zafar installed various new toolboxes which are available in new version of MATLAB and provided orientation and hands-on to the participants. More than 30 participants including Faculty Members, Lab Staff and Research Scholars have participated in this workshop.







## Benchmark WiCOMM-T and IoT training system

25 February 2019

Department of Electronics and Communication Engineering organized workshop "Benchmark WiCOMM-T: Wireless Digital Communication **Training** System" and "Benchmark iCONSeT: An IoT Training System". The program was scheduled on February 25th, 2019 at ECL-8 Wireless Lab of the Department of Electronics and Communication Engineering, Jaypee University of Information Technology, Waknaghat, Solan, H.P.

Dr. Shweta Pandit, Mr. Alok Kumar and Mr. Pramod Kumar were the Coordinators of the program. The program was started with the welcome speech by Prof. M. J. Nigam, HOD,





ECE. Thereafter Mr. M. SivaKumar, Assistant Manager-Technical Support, Benchmarks Electronic Systems Private Limited gave demonstration on WiCOMM-T kit which is SDR platform kit. Some of the basic experiments were performed in the lab on WiCOMM kit and queries were raised and answered. The faculty have done the hands-on activity on the kit. Afterwards, in post lunch session "iCONSE-T: IoT training system" kit demo was given. Various sensors activities and its application was observed through the kit. More than 40 participants including Faculty Members, Lab Staff, Research Scholars and B.Tech final year students were participated in this workshop.





# **Expert Lecture**

on 22nd February, 2019.

# Shri Mayank Sood, Patner in the K & S Technology Group 22 February 2019

IPR Cell organized a Guest Lecture by Shri Mayank Sood, Partner in the K& S Technology Group on "PATENTS ON COMPUTERS AND ELECTRONICS" in Jaypee University of Information Technology in collaboration with Himachal Pradesh Council for Science, Technology & Environment (HIMCOSTE)

Mr. Mayank has an expertise in filing of patent applications and prosecution in the areas of wireless communication, smart phone processes, modem and related applications, video coding and compression, electrical components in automobiles, medical devices, home appliances, e-commerce and business methods, defence related components etc. He provides opinions on patentability, invalidations, FTO and product clearances, enforceability of patent claims among

others. He assists inventors in preparing invention disclosure. He has substantial experience in drafting of patents in various fields such as automotive and electric vehicles and related parts, 5G, electronic circuits, computer software, home appliances, smart phones etc. He regularly appears before the Indian Patent Office and Intellectual Property Appellate Board in connection with the prosecution of patent applications. He interacted with faculty members and Ph.D Research scholar and discussed about the latest research issues related to Patents.

This expert lecture was coordinated by Prof. (Dr.) Sudhir Kumar, Professor, Department of BT/BI, Dr. Shruti Jain, Associate Professor, Department of ECE and Dr. Pardeep K Singh, Assistant Professor, Department of CSE/IT.







## Webinar – TIEDC

by Mr. Kshitiz Gupta

28 January 2019

A webinar was held on 28 January 2019, at TIED cell to provide the students with an opportunity to get a head start in the field of entrepreneurship and marketing, the webinar began with an introduction of Mr. Kshitiz Gupta (associate brand marketing nearbuy.com and alumni JUIT) who was the spokesperson. He shared the experiences of his college life, about how his growth was during college time. He asked many questions from the students related to technology and one of them was, "Which was the most frequently used communication app in India?" Almost all attendees shouted WhatsApp, which was wrong, as he told that 50 to 60 % of India used share chat, which is now one of the most frequently used apps. There are many things a student could do during his college life and three of the most important things he mentioned were, that one must listen to TED talks in order to derive inspiration and ideas

from it. Second, was that one must create his own professional network through LinkedIn and prepare a good CV for future aspects. And finally, the third one was that all the students must do an internship to know more about the real-time scenario of companies and to be versed about the Trends that are in demand. Lastly, the session ended on a cheerful note when everyone thanked Mr. Kshitiz Gupta for joining and imparting his great knowledge.





## **Bootcamps**

#### Startup India Yatra Van

16 November 2018

The Startup India Yatra van, (a project under Startup India Scheme) had a stoppage at Jaypee University of Information Technology on 16 Nov 2018. The van, along with some government officials reached the University at 11:30 am. The officials briefed the students about the Startup India Scheme and the objective of the Yatra van. The volunteers of TIED Cell encouraged the students to register their ideas under the Startup India Yatra.

The Department of Industrial Policy And Promotion, Startup India and the Government of Himachal Pradesh have committed to creating a world-class technology start-up ecosystem by fostering entrepreneurship and a culture of innovation.



More than 150 students registered to pitch their idea and to get selected for the acceleration programme. All in all, their visit was a great opportunity for the students of the university and it also acted as a platform to spread awareness regarding Startup India and Himachal Pradesh Startup Yatra.



## Code wth Coffee

#### By TIEDC

15 -21 January 2019

"Code With Coffee" was a weekly fun development challenge organized by "TIED cell and ACM-JUIT" for the students of Jaypee University Of Information Technology. The event started from 15th January, 2019 and after that weekly challenges were given to the participants through the GitHub repository of Code With Coffee. A total participation of 270 students was received and as the deadlines passed for the challenge, Solutions were provided, and doubt sessions were held. The resource person was Mr. Akhilesh Kumar (Vice chairperson at ACM-JUIT).

During the whole event, participants were helped to learn 'C++, JAVA, Web Development, Python and Machine Learning'. Participants gained confidence in the technical side and studying their courses has become easier for them.



In nutshell the whole event was a great source of learning, for both the participants and organizers. Both sides got to learn and develop quite a few skills which is going to help them in every aspect of their life. We at TIED cell look forward to organizing more events which are fruitful for us as well as for the people out there.

# Innovation under TIEDC

21 November 2018

Jaypee university of Information Technology has established Institutional Innovation Council (IIC) as per the Norms of Innovation Cell, Ministry of HRD, Govt. of India on 21 Nov ,2018 under the president ship of Prof. Ashish Kumar. The members of the council are Dr. Nishant Jain and Dr. Udayabanu M.



# Design Thinking for Entrepreneurs and Strategists/Designers

18 November 2018

We often think about the brighter side of everything. But, most of the times, the darker side, or the negative side overshadows the positive one. An one-hour session on Design Thinking for Entrepreneurs and Strategists was conducted by TIEDC. It was held on November 18, 2018 at 4:00 pm at TIED cell. Design Thinking is a design methodology that provides a solution-based approach to solving problems. It's extremely useful in tackling complex problems that are ill-defined or unknown, by understanding the human needs involved, by re-framing the problem in human-centric ways, by creating many ideas in brainstorming sessions, and by adopting a hands-on approach in prototyping and testing.

The first task was to divide the participants into random teams, then everyone was asked to write the positives as well as negative points regarding our e-cell on the Sticky notes provided. The whole concept was compared to a Sail boat where the Sail helps a boat to sail in a given direction whereas anchor stops it. Same way we had to stick the positive points on the Sail and Negative on the Anchor.

The participants implemented the method of "WORKING TOGETHER ALONE", where, after individually putting up our problems and then prioritizing them by voting for the issues participants were facing, all discussed amongst ourselves the solutions to the problems that were arising. Different people came up with different solutions. So, all made a graph of EFFORT vs IMPACT, and placed the solutions provided accordingly. The best solutions fell under the category of Low effort/High impact. In this way, we were able to solve many problems. The Session ended with a positive note by working on these problems soon.





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# JUIT Annual Book Exhibition

15<sup>th</sup> & 16<sup>th</sup> November 2018

The Learning Resource Center of the University had organized its Annual Book Exhibition on the campus during 15<sup>th</sup> and 16<sup>th</sup> November of 2018. The book exhibition is helpful to students in many dimensions because not only one get connected to good text books but also many other books of general nature which are helpful to improve overall personality. It was undoubtedly an enriching event which added new dimensions to book recommendation and

selection process for enriching the library collection. Students' participation in the event was overwhelming. The main objective of this book exhibition was to promote long-life learning and intellectual development in the competitive environment by building a state-of-the-art collection in key areas of the university. Around 22 well known publishers were displayed their latest publications. The event was well appreciated by one and all.









## Hostels' Activities

### Motivational Seminar by 'JUIT Student - Soham Ahuja (171015)

16 November 2018

Soham Ahuja is a student of second year ECE branch who had completed his schooling from St. Luke's Sr. Sec. School, Solan. He has represented Himachal Pradesh on National Level in theatre and dramatics, securing the 2nd position. He has been titled as the "Best speaker of Shimla", the "Best Orator" of St. Luke's School and has won a number of inter and intra state English Elocution competitions. The motivational speaker, Soham Ahuja has conducted a number of such seminars around Solan vicinity.

"SANCHETNA- Dawn of a new vision" is a selfproject of Soham Ahuja under the supervision of Dr. Rakesh Bajaj (Associate Professor, Department of Mathematics), wherein he has been conducting motivational seminars for different schools and colleges in and around Solan vicinity. He has already done it in 7 schools and colleges where he got an amazing response from all of them and appreciation letters from a few as well. On 16 November 2018, a motivational seminar on the

topic "Always Being a Winner" was conducted in LT-2, JUIT, Waknaghat. A total of 55 enthusiastic students were present to attend the seminar. The motivational speaker Soham Ahuja started the seminar by reciting the story of a guy named Pappu who was always engrossed in the rat race to be successful. In the next part of the seminar all the students were asked to close their eyes and live their dream, eventually realizing the power of celebrating life. Further he listed out the various qualities of a winner such as, happiness, contentment, positive thinking and asking for more in life. He described all these qualities in detail by citing examples from daily life and said that all of us must possess all these qualities in order to become winners of our own lives. Finally, the seminar ended with the story of a Japanese Marathon runner who with her injured leg and unbeatable spirit of never given in, crawled 300m to reach the end line. He concluded by saying that "Winning is not about getting on the top, it's all about completing the race".



## Outreach activities

#### at NDPSS School Galore at Budhwin, Hamirpur

7 December 2018

A microbiology workshop on 7th December 2018 at NDPSS School Galore at Budhwin, Hamirpur, H.P was organised by the experts from JUIT. The JUIT faculty member Prof. Dr. Sudhir Kumar, Head of Department of BT and BI along with research scholar, Neha Kumari Department of BT and BI were the resource persons.

The objective of the workshop was to give orientation to +1 and +2 students about the biotechnology, bioinformatics streams of knowledge and career opportunities in such subject branches. The students were also given lectures about the subjects and demonstrated various tools associated with the subject areas.

The students actively participated in the interactive session as well performed string test for Gram-positive and Gram-negative bacteria successfully. This activity resulted in an increase in their interest in the field of microbiology and biotechnology as evident from their queries.

The feedback from participants in this activity has been positive. Students ask questions in the interactive session which show their interest and curiosity. A student also emailed the summarized activity of that day in written form which showed their interest and positive attitude in the area of Microbiology and Biotechnology.





## **Outreach activities**

Workshop on Biotechnological Techniques at Govt. College Sanjauli, Shimla 15 December 2018

Department of Biotechnology and Bioinformatics Jaypee University of Information Technology Waknaghat, Solan and Centre of Excellence, Govt. College, Sanjauli, Shimla jointly organised one day workshop or 'Biotechnology Techniques" at Govt. College Sanjauli on 15th December 2018.

The main objective of the workshop was to make B.Sc. (Medical) students and faculty members, aware of Biotechnology techniques and to showcase the strength of Jaypee University in this area. Dr. Anil Kant, from JUIT and Dr. Anil Kumar Thakur from Govt. College Sanjauli coordinated the event. Prof. C B Mehta, Principal, Govt. College Sanjauli inaugurated the workshop and Prof. Sudhir Kumar presented the overview of the workshop. This was followed by parallel practical cum demonstration sessions on different modules of the workshop in which Biotechnology techniques were demonstrated jointly by the faculty members and Ph.D Scholars from JUIT



and faculty members of Govt. College Sanjauli as per the following details:

Practical Demonstration of Biogas Reactor	Dr Sudhir Kumar, Dr. C. L. Dharma, Ms Pooja,Mr. Karam Das, Dr. Nidhi
Molecular Biology: Demonstration on PCR, Restriction Enzymes, Gel electrophoresis, Plant Tissue Culture Bioinformatics Data	Dr. Anil Kant Thakur, Dr. Anil Kumar Thakur, Ms. Soniya, Ms Rolika and Mr. Ismail Siddiqui Dr Raghu M.
base: Retrieval and Analysis	Yennamalli, Arvind, Somlata
Antigen and Antibody based diagnostic techniques	Dr. Rahul Shrivastava, Dr. Meenakshi Sharma, Ms. Ayushi, Mr. Baleshwar Shukla, Ms Shweta



## **Outreach activities**

at St. Bede's College, Shimla

28 February 2019

On 28 February 2019, 'National Science Day' with the theme 'Science for the People and the People for Science' – a One Day Workshop was organized by St. Bede's College Shimla. The workshop was conducted by the resource persons from Departments' of - Biotechnology

& Bioinformatics and Physics & Materials Science, JUIT, Waknaghat.

About 150 students of B.Sc (medical and non-medical), M.Sc. (Microbiology and Botany) streams participated in the workshop. The main the objective of workshop was to educate and motivate students for exploration of

different arenas in science, so that they may pursue a research oriented career in area of their interest; along with showcasing the strength of Japyee University in research and academics. Prof. Sudhir Kumar, Dr. Tiratha Raj Singh, Dr. Jata Shankar, Dr. Pankaj Sharma, Dr. Sanjiv Tiwari, Dr. Hemant Sood, Dr. Rahul Shrivastava, Dr. Ragini Raj Singh, Ravindra Tiwari along with research scholars were delivered lectures and given hands-on.





The event was arranged by science fraternity from St. Bede's college in a perfect manner for the successful completion of the event. St. Bede's Shimla. College, administration. Coordinators from St. Bede's College, Shimla. JUIT administration, staff, research scholars, faculty members of

the Department are

deeply acknowledged for their unconditional support. Overall the event was fruitful and interactive for everyone who attended it whether students or teachers.





# Awareness and Exposure Visit

#### **Farmers visited JUIT**

25 - 26 December 2018

A Visit of farmers organised at JUIT in collaboration with DST-SYST Funded Project On "Socio-Economic Upliftment of High Altitude Farmers of Himachal Pradesh Through Transfer of Micropropagation Technologies for High Value Medicinal Herbs" On 25th and 26th December, 2018.

Five farmers of The Phati Jana Cooperative Agriculture Service Society, Village Archandi, Kullu of Himachal Pradesh visited Department of Biotechnology and Bioinformatics for Awareness and Exposure visit for improving their socioeconomic status and exploring future



avenues for themselves and for their society members. They have reached JUIT on 25th December and in the evening media preparation was carried out for demonstration of plant tissue culture techniques. On 26th they were informed about basics of plant tissue culture and different ways of carrying out micropropagation of



medicinal plants. They were demonstrated with plant tissue culture techniques in Plant Tissue Culture Lab of the Department of BT &BI. Afterwards they have carried out transplantation of tissue culture plants in the glass house of the department. They were taken to High end instrumentation lab where they were informed about quantification of medicinal compounds for the quality assurance of medicinal plants. They have visited other labs and finally taken to Biogas plant near mess area, where Mr Karam Das has provided the information about the digester and modes of producing Biogas with high efficiency protocols. Farmers were highly amazed and have



quite satisfying feedback with this exposure visit and they requested for summer trainings. Dr Hemant Sood, Associate professor in the Department of BT&BI, Jaypee University of Information Technology, Waknaghat has coordinated this visit along with Rolika Gupta (PhD Scholar).



## **Educational Tour**

Students' Visit to Central Research Institute, Kasauli, H.P.

20 November 2018

Academic institution visit (a part of Industrial visit) was carried out at Central Research Institute Kasauli- H.P on 20 th November, 2018 especially for third semester student. The purpose of the visit was to make students aware about how various activities related to microbiology, vaccine, antisera and diagnostic reagent production are carried out in Govt. research institution. This was also to provide them feel of biotechnology applications as soon as they start their course.

Central Research Institute (CRI) is a premier research institution dedicated to research in the field of medical and public health, manufacture of



vaccines and antisera, human resource development and to act as a national referral centre for public health problems. The contribution of the Institute towards vaccine production during the period of the Second World War for the immunization of troops to keep them fighting, finds no parallel. Recent developments in regulatory requirements and introduction of Schedule M concept in vaccine manufacturing



emphasized the need of cGMP compliant infrastructure and processes. Creation of CGMP compliant DPT production facility has made CRI as the first Central Government Institute to have cGMP compliant infrastructure for vaccine production.

Dr. Jitendraa Vashistt, Dr. Abhishek along with 46 students visited the research institute located in Kasauli — H.P. The faculty member had an interaction with CRI Scientists — Dr. Sankhyan, Dr Yashwant and briefed him about the program of the department. The areas were identified for possible collaboration of JUIT-CRI. Mrs Preet Thakur of CRI guided the JUIT team to the



respective laboratory, where an orientation of institution was given by Mrs. Thakur about history and main products developed at CRI. Students took almost three hour to see complete set of instruments and production facilities of vaccine manufacturing. This was followed by questions of students. The JUIT team appreciated staff member who guided students and answers their queries.



# **Musical Evening**

Hasta La Vista - Farewell – 2K19

29 January 2019

Farewells are subject to overwhelming emotions and a need to get the boat sailing, and when one spends 4 of the best years of their life in a place, the departure should be ceremonious.

The Cultural Club of JUIT Youth Club organized "Hasta-La-Vista", the first of it's kind Cultural Program of the University, to give a proper enriching Farewell experience to the students of the Batch of 2019. Not a Passing Out Parade, but certainly an event that ranks right up with it. It was a night of music and rhythm. One event, one night but certainly more than that, it was a consolidated effort to make the

graduating batch realise what college was about all through these years and to make them laugh and dance together for perhaps the one last time.

The night was filled with musical performances by participants from the first to third year. A harmonious melody amalgamating beautifully, a touch of rock-n-roll with a touch of separation. Later in the evening, the stage was taken over by the two regional dance groups of the University, the Pakke Pahaadi with their famed Naati and the United Bhangra Crew to pump up the audience with their ever so energetic performances.









# **Celebration Galore...!**

## **Republic Day**

26 January 2019

The 70<sup>th</sup> Republic Day of India was celebrated at the campus on 26<sup>th</sup> January 2019. The Registrar Maj. Gen Rakesh Bassi, Rtd coordinated the pride ceremony of Republic Day. The National Flag was hoisted by the Hon'ble Vice Chancellor, Prof. Vinod Kumar. The ceremony was taken place near Vivekananda Statue at 10 AM in the campus. The National Cadet Corps (NCC) wing of the University marched parade and solute the national flag. Bhutanese students of the university were also attended the event and served Bhutanese snacks to all present there.















## **Celebration Galore...!**

Army Day – How's The Josh? January 15, 2019

Army Day in India is celebrated with great enthusiasm every year on 15th of January. It has been started celebrating to respect the Lieutenant General of India, K. M. Cariappa (Kodandera Madappa Cariappa) who was the first Indian Army's Commander-in-Chief. It is celebrated every year at all the Army Command headquarters and national capital by organizing army parades including many other military shows. The 71st Indian Army Day in the national capital was celebrate with great enthusiasm but this year the Jaypee University of Information Technology, Waknaghat also celebrated the Army Day in their own way. Rotaractors came up and expressed their feelings for the Army and the country with their pride filled speeches for the soldiers protecting us, even singing patriotic songs that filled the atmosphere with great pride for the nation and the army. But the extraordinary thing that was witnessed during

the celebration was how everyone gathered and made a human chain to form "URI" and a voice shouted "How's the josh" to which everyone with pride replied "High Sir!". The Indian Army is nation's pride, the sentinels of the liberty. Citizens sleep securely knowing Indian army is ever awake and ever vigilant. The event was coordinated by Dr. Shruti Jain, Associate Professor, Department of ECE.





## **Centre of Excellence**

# In Sustainable Technologies for Rural Development Formed Charcoal Briquettes from Pine needles

January 2019

Pine needles (leaves) pile up in adjoining forest of JUIT and also other areas of H.P. At times, the needles cause forest fire due to presence of resins in them.

The Centre of Excellence in Sustainable Technologies for Rural Development, Department of Biotechnology and Bioinformatics is working on managing this waste. The pine needles were converted to charcoal briquettes and then used in place of coal.



This technology will be promoted in the villages of HP to manage the pine needles waste. This will also generate a renewable source of energy and livelihood avenues for villagers and self help groups.

This is a low-cost technology converting low bulk density biomass (pine needles in our case) into high density briquettes. We used a kiln and a mould. The technology was developed by Mr. Karam Das, Dr. Sudhir and Dr. Ashish.





# Innovation Awards received by students

28 - 30 November 2018

An event named Startup India Yatra Finale was held at IIT Mandi between 28-30 November, 2018. The state's Startup programmed was aimed at turning its educated youths into job providers from job. There were around 70+pitches in the field of agriculture, Social, Technology etc. and the ideas were evaluated by a proper judging panel of around 15 people, From TIED cell of JUIT seven ideas were pitched

and out that 3 won the prizes. TIEDC won two awards for ideas SVAP and Aquaneer. SVAP got 2nd prize in social innovation category and also a cash prize worth Rs 30,000. Also, Aquaneer got 3rd prize in women entrepreneurship category with a cash prize worth Rs 20,000. Our Incubate Mr. Puneet Thakur got 2nd prize of worth Rs. 30,000/- in agriculture category.





# Startup Launched

15 November 2018

The startup of Mr. Anuj Sharma with startup idea "LocalGuy" (incubatee of TIEDC), got his startup launched by our Hon'ble Chief Minister of Himachal Pradesh Shri Jairam Thakur ji on 15 November 2018 at Shimla. LocalGuy was inaugurated at Chief Minister's Residence in presence of Hon. Minister of Industries Sh. Vikram Thakur ji and Minister of Education Sh. Suresh Bhardwaj Ji, while the CM flagged off the Startup Yatra Convoy initiated by Hon. Prime Minister of India under Startup India initiative.



## **Patent Granted**

21 December 2018

A patent is granted jointly to JUIT and Ayurvet Ltd. (Patent number 304824) on 21st December 2018 for an invention entitled 'Process of production ofcellulase and pectinase from herbal industry residue ". The patent was filed on 20th January 2011 as application no. 139/DEL/2011. The inventors are Dr. Sudhir Kumar, Dr. Mamta Kumari, Dr. R.S. Chauhan, and Mr. K. Ravikanth (from Ayurvet Ltd.). The research work was sponsored by Ayurvet Ltd., Baddi, Himachal Pradesh and carried out at the Department of BT and BI of JUIT.



# **Faculty Achievements**

#### Dr. Shruti Jain, Department of Electronics and Communication Engineering



Dr Shruti Jain, Associate Professor, ECE Department, has been appointed 'Editor in Chief' of ENGMEDNEWS (bimonthly newsletter). ENGMEDNEWS is the bimonthly newsletter of Biomedical Engineering Society of India (BMESI).

### **Faculty Invited for Guest Lectures:**



**Dr. Tiratha Raj Singh**, Associate Professor, BI-BT Department, chaired a session at International Conference on Bioinformatics INBIX-2019, during Feb., 22-23, 2019, at HMV, Jalandhar, India.

**Dr. Tiratha Raj Singh,** Associate Professor, BI-BT Department, delivered an invited talk at International Conference on Bioinformatics INBIX-2019, during Feb., 22-23, 2019, at HMV, Jalandhar, India.



**Dr. Raghu M. Yennamalli**, Assistant Professor (Grade II), BI-BT Department, was the External Examiner for M.Sc Microbiology/Biotechnology IIIrd Semester 14th December, 2018.

**Dr. Raghu M. Yennamalli**, Assistant Professor (Grade II), BI-BT Department, Invited for delivering a talk and conducting workshop on Bioinformatics 4th February 2019 at School of Biological Sciences, Symbiosis International University.

# Ph.D. Snapshot

Following Research Scholars completed Ph.D. during November 2018 to February 2019:



**Arun Chauhan** (106505), Research Scholar, Department of Bioinformatics has completed his Ph.D. on "**Development of Computer Aided Diagnosis Methods for Efficient Tuberculosis Detection**" under the supervision of Late Dr. Chittaranjan Rout.



Ankita (136502), Research Scholar, Department of Bioinformatics has completed her Ph.D. on "Computational Studies to Investigate Human DNA Repair Associated Malignancies with Special Relevance to Colorectal Cancer" under the supervision of Dr. Tiratha Raj Singh



Jagdish Singh Arya (126559), Research Scholar, Department of Biotechnology completed his Ph.D. on "Characterization and Evaluation of Onion (Allium Cepa L.) Germplasm at Leh, Trans-Himalaya, India" under the supervision of Dr. Anil Kant.



Neha Kondal (146954) Department of Physics and Material Sciences has completed her Ph.D. on "Development of Transition Metal Doped Polycrystalline ZnO for Spintronics Applications" under the supervision of Dr. Sanjiv Kumar Tiwari.



**Reema Aswani** (136213), Research Scholar, Department of Computer Science has completed her Ph.D. on "Bio-inspired Computing for Outlier Detection: Select Studies in Web 3.0 Domain" under the supervision of Prof. S P Ghrera.



Shraddha Tiwari (136560), Research Scholar, Department of Biotechnology has completed her Ph.D. on "Evaluation of Proteins Involved in Germination of Toxigenic Aspergillus Flavus Conidia and Studies on Phytochemicals as Anti- Aflatoxigenic Agent" under the supervision of Dr. Jata Shankar.



**Sukhnandan Kaur** (136215), Research Scholar, Department of Computer Science has completed her Ph.D. on "**Holistic Multilingual Sentiment Analysis on Reviews in Social Media**" under the supervision of Dr. Rajni Mohana.

# Intellectual Capital

#### **PUBLICATIONS IN JOURNALS**

Arora, R., Chand, S., & Sharma, P. (2018). Polyaniline: tin oxide polymeric nanocomposite films. An electrical and dielectric study. Materials Science-Poland, 36(4), 711-716.

Chand, S., Sharma, E., & Sharma, P. (2019). Phase change induced quantization in NIR emitting Ag2S nanocrystals: structural and optical response for solar energy applications. Journal of Alloys and Compounds, 770, 1173-1180.

Devi, M., Durai, R. R., & Xu, H. (2019). Design of T-Direct codes over GF (2^N) with increased users. Finite Fields and Their Applications, 55, 202-215.

Gupta, N., & Kanth, N. (2018). Analysis of Nip Mechanics Model for Rolling Calendar Used in Textile Industry. Journal of the Siberian society for Computational Mechanics, 12(2), 39-52.

Kumar, A., Mehta, V., Raj, U., Varadwaj, P. K., Udayabanu, M., Yennamalli, R. M., & Singh, T. R. (2019). Computational and in-vitro validation of natural molecules as potential Acetylcholinesterase inhibitors and neuroprotective agents. Current Alzheimer Research, 16(2), 116-127.

Kumar, A., Singh, V., Singh, H., Sharma, P., & Goyal, N. (2019). Electronic transport properties of (Se80Te20) 100-xZnx ( $2 \le x \le 6$ ) chalcogenide alloys. Physica B: Condensed Matter, 555, 41-46.

Sharma, A, Thakur P, Vashisht R., Shukla, A. (2018), "Durability evaluation of normal and high performance concrete", Journal of civil and Environment technology, 5(5), 609-614.

Shishodia, S. K., Tiwari, S., & Shankar, J. (2019). Resistance mechanism and proteins in Aspergillus species against antifungal agents. Mycology, 10(3), 151-165.

Shukla, R., & Singh, T. R. (2019). Virtual screening, pharmacokinetics, molecular dynamics and binding free energy analysis for small natural molecules against cyclin-dependent kinase 5 for Alzheimer's disease. Journal of Biomolecular Structure and Dynamics, 1-15.

Singh, T. R., & Thakur, J. (2018). FrameOUT and FrameOUTDB: A web based application and repository for the identification and analysis of frameshift mutations. International Journal for Computational Biology (IJCB), 7(1), 35-48.

Thakur, R., & Shankar, J. (2019). Proteome Analysis Revealed Jak/Stat Signaling and Cytoskeleton Rearrangement Proteins in Human Lung Epithelial Cells During Interaction with Aspergillus terreus. Current Signal Transduction Therapy, 14(1), 55-67.

#### PUBLICATIONS IN CONFERENCE PROCEEDINGS

Abhilash Shukla, Prakash Nanthagopalan (2018): Influence of packing density on compressive strength of UHPC for binary, ternary and quaternary blends of cementitious materials. E-Proceedings of the Conference on NEXT FRONTIERS IN CIVIL ENGINEERING: Sustainable and Resilient Infrastructure [30 November 2018- 1 December 2018, pp.-54-55.

Abhilash Shukla, Neeraj Meena, Prakash Nanthagopalan (2018): Experimental Investigations on Binary, ternary and Quaternary blends of cementitious materials for Ultra high performance concrete. Proceedings of 3rd R. Raikar Memorial International Conference and Gettu-Kodur Symposium on Advances in Science and Technology of Concrete [December 14-15, 2018], Volume II, pp. - 131-137.

Archit Pundir, Anaida kad, Himanshi Mehta and Hemant Sood (2018). Effect of electricity on the morphological as pects and metabolite production in *Rhodiola imbricata* .BIOCAMP 2018 National Symposium on Current Trends and future prospects in Biotechnology organized by Department of Biotechnology, Panjab University, Chandigarh.1<sup>st</sup> and 2<sup>nd</sup> November.2018(poster)

Neelam Gupta & Neel Kanth (2019, January). Study of heat flow in a rod using homotopy analysis method and homotopy perturbation method. In AIP Conference Proceedings (Vol. 2061, No. 1, p. 020013). AIP Publishing

Kritika Thakur, Payal Thakur and Hemant Sood. 2018. Hardening of Tissue Cultured Plants via Hydroponics System: An Alternative and Rapid Methodology "International Conference on New Horizons in Green Chemistry & Technology organized at Uttaranchal college of Applied and Life Sciences, Uttaranchal University, Dehradun 27-28 November, 2018 (poster).

Saurav, Shukla, A.K. and Malviya, P. (2018) "A comparative study of fire resistance of concrete incorporating ultrafine slag", 2nd International conference on "Advances in the field of health, safety, fire, environment, and allied sciences (HSFEA 2018)", held at University of Petroleum and Energy Studies (UPES) Dehradun, November 16-17, 2018. [Springer]

Saurav, Shukla, A.K. and Talwar, D. (2019). "Finite Element analysis of beam with corrugated web of a Jib crane", National Conference on Advances in Structural Technologies (CoAST-2019)under TEQIP-III", held at National Institute of Technology (NIT) Silchar, 1st -3rd February, 2019 [Best Paper award, Springer].

Saurav, Shukla, A.K. and Maiti, P.R. (2019). "Finite Element analysis of Unconfined Brick Masonry with Experimental Verification", National Conference on Advances in Structural Technologies (CoAST-2019)under TEQIP-III", held at National Institute of Technology (NIT) Silchar, 1st -3rd February, 2019. [Springer]

Sauray, Shukla, A.K. and Sharma, N. (2019). "Experimental study of the use of Alccofine as a corrosion inhibiter in steel fiber reinforced concrete", National Conference on Advances in Structural Technologies (CoAST-2019) under TEQIP-III", held at National Institute of Technology (NIT) Silchar, 1st -3rd February, 2019. [Springer].

Saveena, Rolika Gupta, Anubhavi Singh and **Hemant Sood**. 2018. Effect of growth hormones on in vitro propagation and secondary metabolite production in *Stevia rebudiana* "International Conference on New Horizons in Green Chemistry & Technology organized at Uttaranchal college of Applied and Life Sciences, Uttaranchal University, Dehradun 27-28 November, 2018(oral)

#### **CHAPTERS IN BOOKS**

HILLY RAMBLINGS - A JUIT NEWSLETTER

Pavan Kumar Agrawal, Rahul Shrivastava and Jyoti Verma (2019). Bioremediation Approaches for Degradation and Detoxification of Polycyclic Aromatic Hydrocarbons. In Ram Naresh Bharagava, Pankaj Chowdhary, Emerging and Eco-Friendly Approaches for Waste Management (pp. 99-119). Singapore: Springer. [ISBN: 978-981-10-8669-4].

Shukla, A.K, Saurav and Maiti, P.K. (2019). "Experimental Study of Confined Brick Masonry Building", Lecture Notes in Civil Engineering in Advances in Structural Engineering and Rehabilitation, Volume 38, ISBN 978-981-13-7615-3, Springer.

Tiratha Raj Singh and Ankush Bansal (2018). Epigenome-Wide DNA Methylation and Histone Modification of Alzheimer's Disease, Computational Epigenetics and Diseases, Volume 9 in Translational Epigenetics, 131-148. Elsevier. [ISBN 978-0-12-814513-5].

Vishal Mehta (2019). A New Morgenstern Type Bivariate Exponential Distribution with Known Coefficient of Variation by Ranked Set Sampling. In Ranked Set Sampling (pp. 127-141). Academic Press.

Vishal Mehta (2019). Shrinkage Estimators of Scale Parameter Towards an Interval of Morgenstern Type Bivariate Uniform Distribution Using Ranked Set Sampling. In Ranked Set Sampling (pp. 143-155). Academic Press.

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## NEWS CLIPPINGS

## सेंट बीड्ज में जैव सूचना विज्ञान पर व्याख्यान

मेडिकल छात्रों के लिए जैव सचना राष्ट्रीय विज्ञान दिवस के अवसर पर विज्ञान पर एक व्याख्यान के साथ शिमला के सेंट बीड्ज कालेज में विश्वविद्यालय के सूचना प्रौद्योगिकी, वाकनाघाट, सोलन से ्राला द्रेम ६ ्रालको नि ए और जैव प्राह्ममें १ और जैव प्राह्ममें १ और तीर प्राह्म वे भे विस् एक टीम द्वारा कार्यशाला का

हुई। डा. रागिनी राज सिंह ने नैनो रेक्नोलॉजी पर बात की जबकि डा. मंजीव तिवारी ने टैनिक जीवन में बनियादी विज्ञान समस्याओं के बारे में चर्चा की। प्रयोगशाला के प्रदर्शनों को भौतिकी और जैव प्रौद्योगिकी प्रयोगों पर अन्य संकाय सदस्यों द्वारा दिया गया था। गौर हो कि जेपी यूनिवर्सिटी हिमाचल के छात्रों को विकासशील परिदश्य में पर्याप्त रूप सक्षम बनाने के लिए वैज्ञानिक पर तकनीकी नवाचारों और

नम अपडेट के प्रसार के लिए

प कालेज स्तर के छात्रों के

## संजौली कॉलेज में बायोसाइंस विभाग ने किया कार्यशाला का आयोजन

शिमला। संजौली कॉलेज के बायोसाइंस विभाग और जेपी विविवॉकनाघाट के बायोइफारमैटिक्स विभाग के साथ मिलकर शनिवार को कार्यशाला का आयोजन किया। कॉलेज प्राचार्य डॉ. सीबी मेहता ने मख्यातिथि के रूप में शिरकत कर कार्यशाला का शुभारंभ किया। उन्होंने कहा कि हर छात्र कॉलेज में आयोजित की जाने वाली इस तरह की शैक्षणिक गतिविधियों में हर हाल में हिस्सा लें। इससे उनका ज्ञान बढेगा और विषय को लेकर समझ बढती है। कहा कि बायोटेक्नोलॉजी क्षेत्र में भागेदारी बढ़ेगी और छात्र शोध कार्य कर समाज तथा राष्ट्रहित के लिए नई-नई तकनीकों को विकसित कर सकेंगे। कार्यशाला में जेपी यूनिवर्सिटी के प्रो. सुधीर कुमार, डॉ. अनिलकांत ठाकुर, डाँ. राहुल श्रीवास्तव, डा. रघु एम चन्ना नाराः रियेक्टर, पीसी आई और माइक्रोबायोलॉजी का डेमोस्ट्रें मिलता है। वहाँ हो का काप के काप भी दिया। कार्यशाला में छात्र-छात्राओं को टिशु कल्चर्

यूएसए के साउथ डकोटा स्कूल पहुंचे जेपी विवि के होनहार चेपी यूनिवर्सिटी आफ इंफोरमेशन टेक्नोलॉजी के एक्सचेंज प्रोग्राम के तहत यूएसए छह विद्यार्थी

के साउथ डकोटा स्कूल आफ महत्स एंड टेकोलॉजी गए हैं। जेपी विवि के कुंजन, वैशाली, प्रिया, पायल, सवीना व तान्या वहां पर छह माह के प्रोजेक्ट पर कार्य करेंगे। इन सभी विद्यार्थियों का चयन उनकी कड़ी मेहनत व विवि बायोटेक्नोलॉजी बायोइफोरमेशन के एचओडी प्रो.

सुधीर कुमार के उचित मार्गदर्शन धुनार अनार के ठावत भागदशन से संभव हुआ है। जेपी विवि के कुलपति प्रो. विनोद कुमार ने कहा कि इस तरह के एक्सचेंज प्रोग्राम मि २० १८० क ५५० वर्ष अध्यन से विद्यार्थियों को काफी लाभ प्राजेक्ट की समाप्ति के बाद कुछ

संस्थान सहित पूर्व देश को भी पीएचडी करने के आफर भी मिलता है। उन्होंने कहा कि इस मिलेंगे। कुलपित प्री, किसी मोनेक्ट को मार्गाक के साम करत क्यार क्लिक्ट को मार्गाक के साम भिष्ण है। १००१ कहा कि इस भिष्ण । अल्पात था. विनाद भोजेक्ट को समाप्ति के बाद कुछ कुमार, निदेशक प्रो. समोर देव गुप्ता विद्यार्थियों को इसी संस्थान या व रजिस्ट्रार भेजर जनरल सकेश व आजान ।वह्यापदभा का इसा सल्धान वा व राजस्ट्रार भज हो लाभ फिर यूएसए को अन्य बस्सी ने बच्चो फीयन यूनिवर्सिटीज से एमएस और शुभकामनाएं दो हैं Wed, 27 February 2019 https://epaper.divyahimachal.com/c/37133088

# जेपी विवि ने छावशा पंचायत को दिए कम्प्यूटर



सोलन-जेपी युनिवर्सिटी द्वारा ग्राम पंचायत छावशा में कम्प्यूटर स्थापित किए गए। यह कार्य ग्राम पंचायत की प्रधान अंजु देवी की उपस्थित में संपन्न हुआ। पंचायत में कम्प्यटर को उन्नत भारत अभियान के तहत विवि दारा तकनिकी शिक्षा को बढावा देने के लिए लगाया गया। इस अभियान के तहत स्वस्थ स्वच्छता. महिलाओं और बाल विकास से संबंधित मददों की पहचान करने और उनका इल करने के लिए स्थानीय लोगों की भागीदारी करने की सलाइ दी। यह अभियान मानव संसाधन मंत्रालय की योजना है। जिसका उददेश्य ग्रामीण भारत को समृद्ध बनाना है। इस योजना का उददेश्य है कि कालेज और विवि के शिक्षक और छाञ शामिल है और आसपास के गांवों के लोगों को राजमर्रा कि समस्याओं से अवगत हो। इसमें विवि की तरफ से सहायक प्रो. रे एवं छात्र दिव्यांग पिपलानी, दीक्षा शर्मा और शशि शेखर शामिल थे

## Four New Patents Granted to JUIT

The Vice-chancellor Prof. Vinc Kumar, Jaypee University Information & Technology, Wa naghat, recently announced t four patents have been granted department of Biotechnology Bioinformatics, in the acade session 2018-19. A patent Industrial Enzymes to con aste to valuable product

ted jointly to Jaypee Uni Information & Techn vurvet industry as he Industrial sp of Prof. Suc \* ment has a cess of enrichi Sunds in kut Tood as lea have also bee department for Jat Lantadene.

## n tops a seet seams Thu. 29 November 2018 कार्यशाला का आयोजन

तिस्थि के सीम वीर शिमला, 15 दिसम्बर (ब्यूरो): सैंटर ऑफ एक्सीलैंस संजौली कालेज में शनिवार को बायोटैक्नोलॉजी तकनीकों पर एकदिवसीय कार्यशाला क आयोजन किया गया। कार्यशाला का आयोजन कालेज के बायोटैक्नोत विभाग व बायोटैक्नोलॉजी एंड बायोडन्फोमेट विभाग जे.पी. वि.वि. व के संयक्त तत्वावधान से किया गया। इस मौके पर जे.पी. वि.िंग प्रो.विनोद कुमार, प्रो. समीरदेव गुप्ता व मेजर जनरल र वक्ता के रूप में मौजूद रहे।कार्यक्रम में छात्रों व वक्ताओं के बा तकनीकों पर पैनल डिस्कशन हुआ। कालेज के प्रिसीपल ने कार्यशाला के मुख्य बिन्दुओं पर विस्तार से जानकारी

पंजाब केसरी Sun, 16 December 2018 ई-पेपर https://epaper.punjabkesa.

# HILLY RAMBLINGS

#### **Coordinators:**

- Dr. Suresh K Chauhan, Learning Resource Centre
- Dr. Ashish Kumar, Department of Civil Engineering
- Dr. Hemant Sood, Department of BT/BI
- Dr. Geetanjali, Department of CSE/IT
- **Dr. Neel Kanth, Department of Mathematics**
- Mr. Pankaj Kumar, Coordinator, T & P
- **Dr. Pragya Gupta, Department of ECE**
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