

Jaipur Engineering College And Research Centre

Ujjwalam Department of Electronics and Communication Engineering Volume 1, Issue 1 March 2017



Department of Electronics and Communication Engineering

Director's Message



We are currently in the era of technology revolution, spearheaded by recent developments in engineering sciences providing sustainable solutions to various issues in different areas. The Indian engineering programs have a promising future particularly the **Electronics and Communication** sectors are on the threshold of becoming global players by 2020. Fragments of this newsletter will track different event and activities that are taking place in the department. I extend my best wishes to all those who contributed to **Ujjwalam** and I am confident that the interaction will be a source of inspiration to the young talent budding in the college, who would be the educationists, technocrats and researchers of tomorrow. They would shoulder the responsibility of bringing in the desired innovations in their fields, leading to the advancement of the country.

Mr. Arpit Agarwal Director, JECRC

Principal's Message



Jaipur Engineering College and Research Centre (JECRC), Jaipur is recognised as one of the best technical institutes in Rajasthan and is adopting the process of change that demands quality outcome based education.

The vision of the institute is to become an institute of excellence in imparting outcome based education, providing platform to students for overall self development that includes ethics, moral values, etc. and develop research aptitude through project base learning.

In the process of implementing outcome based education (OBE) the faculty members are measuring the progress and competency of the student as they go through a course in each semester and are being accessed against pre defined package.

The campus will soon have a video server where video lectures of all under graduate and post graduate programs delivered from the professors of IIT and IISc would be made available to the students 24x7 through a high speed wifi networking. This will create ample opportunities to learn the subject at their own base on their laptops and smart phones.

All the credit goes to outstanding reputation and dedication of the institute for all these years, under the able guidance of visionary Shree Arpit Agarwal Ji, Director of JECRC. Here at JECRC ,Jaipur, we are committed to impart necessary skills and knowledge to our students in best possible manner, in good spirit and in good environment by allowing them to dream big and help them to achieve the same.

> Dr. V.K. Chandna, Principal, JECRC

Mission and Vision of the college

VISION

To become a renowned centre of outcome based learning, and work towards academic, professional, cultural and social enrichment of the lives of individuals and communities.

MISSION

•Focus on evaluation of learning outcomes and motivate students to inculcate research aptitude by project based learning.

Identify, based on informed perception of Indian, regional and global needs, areas of focus and provide platform to gain knowledge and solutions.
Offer opportunities for interaction between academia and industry.

•Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions

VISION

To contribute through excellence in scientific and technical education, teaching and research in Electronics and Communication Engineering & to meet the needs of global

the needs of global industry.

MISSION

•To equip the students with a strong foundation of basic sciences and domain knowledge of ECE, so that they are able to creatively apply their knowledge to the solution arising in their career path.

•To induce the habit of life-long learning to enhance overall performance.

•Students are able to communicate their ideas clearly and concisely so that they can work in a team as well as an individual.

•To make students responsive towards the ethical, social, environmental and economic context for the society. Newsletter ECE, JECRC Foundation, Vol. 1, Issue 1, March 2017



HOD'S Message

The Department of Electronics and Communication Engineering came into existence at the Jaipur Engineering College & Research Center in 2000, by the approval of All India Council for Technical Education (AICTE), to meet the growing requirement of practical design engineers in the country and abroad. The greatest asset of the department is its highly motivated and learned faculty. The available diversity of expertise of the faculty with the support of the other technical staff prepares the students to work in the global multicultural environment. The department not only aims to make our students technically sound and knowledgeable but also to nurture their wisdom and make them a better and responsible human being. The graduates of the Electronics & Communication Stream have been selected by some of the world's leading corporations & as well as by most of the leading Indian counterparts. We hope that we will continue to deliver our best to serve the society and mankind. It is also expected that our students will continue to pass on the skills which they have developed during their stay at this department to the whole of the world for a better society.

- Dr. Lokesh Kumar Bansal

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Program Outcomes

PROGRAM OUTCOMES are Graduate Attributes

•Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

•**Problem analysis:** Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

•Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

•Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

Program Outcomes

•Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and ECE tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

•The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

•Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

•Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

•Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

Program Outcomes

•Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

•**Project management and finance**: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

•Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Educational Outcomes

PEO 1

•To provide students with the fundamentals of Engineering Sciences with more emphasis in **Electronics Engineering** by way of analyzing and exploiting engineering challenges **PEO 2**

•To train students with good scientific and engineering knowledge so as to comprehend, analyze, design, and create novel products and solutions for the real life problems.

PEO 3

•To inculcate professional and ethical attitude, effective communication skills, teamwork skills, multidisciplinary approach, entrepreneurial thinking and an ability to relate engineering issues with social issues.

PEO 4

•To provide students with an academic environment aware of excellence, leadership, written ethical codes and guidelines, and the self motivated life-long learning needed for a successful professional career.

PEO 5

•To prepare students to excel in Industry and Higher education by Educating Students along with High moral values and Knowledge



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Editor's Desk



It is with great pleasure that we bring to you the first issue of **Ujjwalam**, the quarterly newsletter of ECE Department JECRC Jaipur. The name of our newsletter- **Ujjwalam**- signifies **brightness**, With faculty members that consist of bright minds and students who are keen to leave a mark, our future is in safe hands indeed.

The goal of this newsletter is to update you all with the developments at ECE department (JECRC) Jaipur. The current issue will provide the information about the various initiatives of department which are related to academics, research and innovation, student affairs, alumni and departmental laboratory / workshop. This newsletter besides reporting on the major events will also report on laurels earned by our faculty members, staff and students.

While acknowledging valuable inputs received from the faculty members, staff and students, we also welcome suggestions from them to help us develop the newsletter further.

The First issue is in your hands. Happy reading!!

Ms. Shivam Upadhyay

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Inside This Issue!!

Department of Electronics and Communication Engineering



Introduction to Newsletter

The aim of the newsletter is to keep each member of ECE family of JECRC connected and updated. Notable achievements of our students, alumni and faculty members will be highlighted along with some articles on latest technologies, and campus life. We wish that all who contribute to the growth and achievements of the department get acknowledged. We welcome your inputs for future newsletters and urge you to stay connected with us.

Industrial Visit



An Industrial visit was planned for ECE 3rd year Student at Regional Telecom Training Centre, BSNL, Jaipur.

Objective:

- To give an overview of wide range of telecommunication technologies.
- To give an exposure to working/live telecommunication equipment deployed in BSNL.
- •To enhance awareness of the students on various job options in the telecommunication industry.

Attendees: 55 Students of ECE Third Year along with 2 Faculty Members.

Department of Electronics and Communication Engineering organized an industrial visit to Regional Telecom Training Centre, BSNL, Jaipur on 18th Feb, 2017 for ECE Third year students. The industrial visit is coordinated by Dr. Lokesh Kumar Bansal (HOD-ECE) & Mr. Ashutosh Sharma.



About RTTC:

Regional Telecom Training Centre Jaipur is one of the premier training institutes of BSNL. It imparts training in Telecommunication Engineering, modern Information Technology, and Management to BSNL executives, Non-Executives and Engineering students. This centre is equipped with state-of-the-art telecom technology laboratories, which include mobile communication systems of GSM 3G & CDMA, switching systems of OCB-Alcatel France & CDOT make, transmission systems in digital microwave, fiber optics, SDH, STM rings and data communication systems with Internet nodes, Wi-Fi equipment, IP MPLS VPN and Cisco routers. The faculty members are well-qualified technocrats and experienced professionals from among various telecom specialties. The 41 acres of lush green campus houses Library, Hostels and Recreational amenities.



Topics Covered in Lectures and Laboratories imparted by BSNL Senior Engineers:

- Overview of Telecommunication Networks
- •Introduction to the Latest Switches in Telecommunication Industry
- •Fiber-Optic Communication Technology
- •Mobile Communication GSM, CDMA
- •Broadband Technologies
- •Intelligent Networks
- •IP, Networking and Cyber Security
- •Job opportunities in Telecommunication market

Visits to Live Systems:

- •Telephone Exchange and Telecom Network Visit
- •GSM, CDMA, Broadband and OFC live systems Visit

Outcome:

- •Student interacted with real application of Engineering especially in TELECOM Engineering
- Student learned about various generation of mobile communication

Technical Events

RENAISSANCE'17

RMRA

•

ENUE: Jaipur Engineering College and Research Centre

RIPC

Renaissance 2017 year saw a boost of technical events with 7 events directly related to the branch. These events with captivating prizes witnessed an equally enthusiastic participation.



Department of Electronics and Communication Engineering

Quizolic

A technical quiz with 4 rounds of increasing difficulty.

Round 1 had 20 questions with needed 40% minimum to qualify round 2. In round 2, quickest response the to randomly drawn chits progressed to next round. Round 3 was the visual round which pictures in were displayed on the screen and final round was the Buzzer round in which the team that pressed the buzzer first was given chance to answer the question. The team which gave more answers was declared as the winner.

This highly competitive event had 60 teams in total. The judge, **Ms. Aarti Sharma** (Pursuing PhD from MNIT) declared the team of Aarushi Khandelwal and Akshansha Singhal as the winners.



Teacher Coordinators Ms. Ritu Vyas Ms. Shivam Upadhyay

Student Coordinators Harshil Jain Manmeet Kaur Arpit Singhal Ajay Agarwal Aneesh Ansari

Techinobuzz

It encouraged the students to not just think about new technologies but also how to present their ideas. Their ideas were beautifully presented on A-2 Sheets.

While round one judged their creativity and attractiveness of the poster round 2 judged their verbal presentation. Participants stated the applications and the Future aspects of the technology along with the challenges in it's development.

The final round was a rebuttal round in which the judge, **Dr Lokesh Bansal (ECE H.O.D at JECRC Foundation)** crossquestioned each student. The event concluded with the Team of Avni Gupta, Charu Upadhyay and Tarun Chahar coming out as the winners.



Teacher Coordinators Ms. Ritu Vyas Ms. Shivam Upadhyay

Student Coordinators Aditya Gautam Ashish John Aditya Vardhan Ayush Jain Ankit Sankhala Ashish Agarwal

Renovator

Renovator (March 11) It has not only provided a great opportunity to the students of electronics stream to showcase their practical skills but also created a healthy competitive and learning environment. There was immensely enthusiastic participation in the event, that mainly revolved around the electronic circuits studied throughout the entire E&C course. It helped the students to gain practical knowledge by designing various circuits. This event taught students, various techniques and practices that are involved in the real-world application of the concepts and is a great opportunity for the ones who wish for a career in circuitry. Judgment was done by Mr Ram **Singh**, Assistant Professor, Electrical Engineering, and Mr Arun Chopra, B.E., M.B.A., M. Tech., PhD (p), who has over 26 years of experience Teaching, Training in and Management.





Teacher Coordinators Mr. Deepak Sankhla Mr. Veni Madhav Sharma

Student Coordinators Ronak Khandelwal

Sanjay K. Jain Nikita Agarwal Neha Kumari Raveena Sharma Rohit Verna

<u>Technical Hack</u>

Technical Hack

The event was a blend of technical your and presentation skills. It was organised to test the research skills of students. In round 1 participants were provided with a research paper for which they had to write a titled abstract. In final round participants presented a power point presentation of minutes on the 7 same research paper given to them.

Student Coordinators

Aishwarya sharma, Amit kumar, Ankit kumar, Aditya sharma, Anushka agrawal



Teacher Coordinators Mr. Rajesh Bhathija Mr. S.S. Manakatala

Guest of honour Dr. O.P. sharma (Director of Poornima college)

Judges Dr. O. P. Sharma Ms. Ritu Vyas

Reverse Engineering

Reverse Engineering

The event was organised to test the research skills of students.

In this event, participants were asked to develop a working model from the available components of a non working or discarded device according to their innovative idea. The event concluded with the Teams of Anisha Mathur, Anchal Kabra and Himanshu Sharma, Harsh coming out as winners.

Student Coordinators

Prashant Kumar Jha Ravi Ranjan Pathak Ranjan Kumar, Prachi Khandelwal



Teacher Coordinator Mr. Jitendra Sharma

Judges Mr. Nidhish Tiwari

Robofiesta

8th March-11th March, More than 60 teams participated in this technical event many of which were from outside Rajasthan.

Robowar

Two teams competed among themselves. This event with three rounds attracted a huge audience. During the event, many robots got destroyed. The team DEATH WARRIOR'S from Lingaya's University Delhi won and team AJ from PEC Jaipur was the runner-up.

The event was judged by - Mr. Chandra Prakash Sharma and Mr. Nitin Chhabra.

Line Follower

In this event, the compact infrared light robot was made to move on white strips on blackboards using detector. There were 5 checkpoints on the LFR track from which a team could skip maximum 2 checkpoints. The team which completed the track in the minimum time with maximum points was announced as the winner. The winner team was from JECRC University and the runner-up team was from SKIT Jaipur.

The event was judged by- Mr. Abhishek Singh and Mr. Devesh Gupta .

Robofiesta

Formula Zero

In this event, robots were made to cross many hurdles and complete the race in minimum time. The team which crossed all the hurdles in minimum time with maximum points and efficiency was announced as the winner. The winner team was from GTA Mathura and the runner-up team was from SKIT Jaipur.

The event was judged by Mr. Ramesh Bharti and Mr. Naresh Kumar.

Robo-Soccer

Two teams again competed with each other and each team had two robot cars, one Defender and one striker. In the first round, teams had to throw the balls of one's area into the others area using their bots. In the second round the defender robot had to defend the ball from entering the goal post and striker robot had to do the goals. The event was very interesting because of the enthusiasm and competitive spirit of the participants.

The event was judged by Mr. Ravi Soni and Mr. Akhil Vijay.

Robofiesta



Student Coordinators Shubham Bansal Chitrangana Singh

Teacher Coordinators Mr. Vikas Sharma Mr. Ankur Gangwar Mr. Raj Kumar Jain Ms. Parul Tyagi Ms. Vinita Mathur Ms. Shikha Gaur







Game of Drones

Game of Drones

In this event, participants were asked to build a drone to travel from source to destination by crossing various interruptions, hurdles, etc., along with the path of the journey. Various teams from different colleges came to participate in it.

Student coordinate

Aarushi Singh Garvit Chugh Dipanshu Sharma Nikhil Sharma Dushyant Marothia Manav Sharma



Teacher coordinator Mr. Ashish Kulshrestha Mr. Vikash Mishra

Judges

Mr. Manoj Khandelwal (Asst. Director, BSNL) Mr. Rajat Vijay

Student Achievements

Xananoids

In this race of just coming first and not grasping any knowledge, Xananoids took its initial step in inculcating the knowledge among the students of the first year with the basic of robotics. The seminar took place in three sessions. It great to see such was overwhelming enthusiasm of the young buds. We wish that this zeal and curiosity learn more and more stays forever.



The members of the Xananoids club go to various technical fests in a different event. Recently the team took part in plinth tech fest of LNMIIT $18^{th} - 19^{th}$ January in the transporter and stood second in it. The team consist of Mithlesh (ECE) Rishabh (ECE) Harish (Mech) Gaurav (Mech) Jitendra (Mech) and Shubham (CSE).





Recent Publication

Saurabh Barthwal et. al. has presented paper entitled, "An extreme helping hand for handicap people using computer vision" in IEEE International conference on Recent Advances and innovations in engineering' during 23rd -25th December 2016.



Sports News

Volleyball: Parul Sippy (III Year)

Badminton: Toral Jain (III Year)

Table Tennis: Prakashika

Basketball: Vidhushi Agarwal, Rakshita, Lakshita Sharma, Niharika Sethi, Shivangi Sharma.

Basketball and Volleyball teams won two matches and made it up to Semi-finals while the badminton team made it to the Quarterfinals.

Carom: Pranav Bhaeti (III Year) won first Prize in single and doubles in JKLU. He has also won second prize in carom doubles at JNIT.

<u>Congratulation To the Batch</u> <u>Toppers</u>

We congratulate students for their achievements. We would also like to congratulate the program coordinators and faculty members to support the students for achieving their position.

II Semester (2015-2019)- Priyanka Sharma

IV Semester (2014-2018)- Tanuj Kothari

Ms. Pragya Agarwal (Session 2015-2016) secured **10th Position** in Merit list of Rajasthan Technical University, Kota with 84.16%.



Congratulation To GATE Qualified Students

GATE 2017 Qualifiers:

- Jagdeesh Seervi
- Ritu Daryani
- Vishal Ranjan Prasad
- Jitesh Kumar
- Vinod Kr Gill
- Mukul Agarwal
- Rajat Garg
- Bhawna Soni





Vinod Kumar Gill

Vishal Ranjan Prasad

* Cut off Marks in GATE 2017 were General 25; OBC 22.5 and SC/ST/PH 16.60.



<u>Achievements of Faculty</u> <u>Members</u>

Recent Publications

Preeti Barot has presented a paper entitled "4x4 block DCT-DWT Image steganography Grey Scale and Coloured Image" in IEEE International Conference on Quality, Productivity, reliability ,Optimisation and Modelling, ICQPROM-2017, during January 2017.

Shikha gaur has presented paper entitled " Plasmonic Refractive Index sensor based on metal Insulator-metal waveguide" in IEEE international Conference on Recent Advances And Innovation in Engineering, ICRAIE 2016, during 23-25Dec 2016.





The goal of the Training & Placement Cell of the ECE Department is to provide employment opportunities and class world training to students in leading organizations/Industry. The Training & Placement Cell further provides ample opportunities to the students to develop their personality by conducting programs regularly on communication skills and other soft skills. This Cell makes the students Industry-friendly and Industry ready candidates. Under the guidance of **Mr**. Siddharth Chaturvedi, a hard working team arranges training for students in Industries for two to four weeks at the end of the session.

TRAINING & PLACEMENT

<u>Congratulation To Accenture</u> <u>Placed Students</u>

Accenture 2017 Placed:

AANCHAL AASTHA JAIN ADITI SHARMA ADITYA AGARWAL AMAN CHOUDHARY ANISHA MATHUR ANUBHA AGARWAL ANUSHA NANDWANA ARCHI JAIN AYUSHI JAIN AYUSHI KUMAWAT BHAVANA MATHUR BHAWNA SONI DEEPALI GOYAL ISHITA JAIN JAGRITI ARORA JYOTIKA JAIN KIRTIVARDHAN SINGH GOGAWAT KRISHNA VIJAYVARGIYA LAKSHYA DAULANI MALLIKA DHAMIJA MEGHA KUMARI



<u>Congratulation To Accenture</u> <u>Placed Students</u>

Accenture 2017 Placed:

■NEELABH GOYAL ■PRACHLJAIN PRAMUGDHA KHANDELWAL **RASHI GAUR RITU DARYANI** ROHAN KUMAR VERMA RUCHIKA RATHORE RUNAKSHI PURI SAKSHI MAHESHWARI **•**SAKSHI SHIVHARE SHALINI AGRAWAL •SHAMIKA MITTAL SHIKHA KOUL SHILPI PANDEY SHUCHITA SHARMA SUMAN DUDHWAL TAMANNA JAIN TANUJ KOTHARI **TRIPTI KHURANA** VAIBHAV GARG VAISHALI BHARDWAJ **•**SRISHTI SINGH



<u>Congratulation To Mind IT</u> <u>Placed Students</u>

MIND IT 2017 Placed:

ABHISHEK KUMAR SINGH ANAND MOTT ANSHUL PATNI ARVIND KUMAR JHAJHARIA EKANSH AGARWAL **GAURAV KUMAR** KRISHAN KUMAR SHARMA MANISH KUMAR SHARMA MOHD SHAHID PRASHAM JAIN PULKIT KHANDELWAL **RAMAKANT SHARMA •**SHUBHAM SINGH ABHILASHA SHARMA RAJEEV SHARMA **RUCHI SHARMA •**SIMRANJEET KAUR

Congratulation To All Placed Students

- •AYUSHI KANKARIA (TECH FLEETERS)
- APOORVA SINGHAL (TECHIENEST)
- •KAPIL GUPTA (TECHIENEST)
- KUSHAGRA AGRAWAL (TECHIENEST)
- MAYANK ARORA (TECHIENEST)
- RAJAT GARG (TECHIENEST)
- •RITIK JAIN (TECHIENEST)
- •JITESH KUMAR (ANORA LABS)
- ADHISH DUSAD (APPEAL GROUP)
- ROMMEL SHARMA (APPICNO)
- •VEERANGANA (BULLS EYE)
- TARANG UPADHYAY (DLB GROUP)
- SM. SANA (DLB GROUP)
- •SHIVANGI KHANDELWAL (FIRST AMERICAN)



Congratulation To All Placed Students

- SHARAD GUPTA (HEXAVIEW TECHNOLOGIES)
- •SWATI SINGHI (HEXAVIEW TECHNOLOGIES)
- •ARPIT MISHRA (JUST DIAL)
- DEEPAK KUMAR SHARMA (JUST DIAL)
- PARSHANT MAHENDRA (JUST DIAL)
- •CHARCHIT GUPTA (JUST DIAL)
- •VARTIKA MAHESHWARI (LANTERNINFOSYSTEM)
- •ABHISHEK SINGH JAT (LANTERNS INFOSYSTEM)
- •ABHISHEK RATHI (MIND TREE)
- MANISH PUSHKAR (MIND TREE)
- •SAURABH BARTHWAL (MIND TREE)
- VISHAL RANJAN PRASAD (MIND TREE)
- •YATIN KALIA (MIND TREE)
- ■TAPAN SONI (NODD)
- MOHIT JAIN (SLK TECHNOLOGIES)



<u>Congratulation To Ericsson</u> <u>Placed Students</u>

Ericsson 2017 Placed:

ABHINAV KHANDELWAL ARPITA MANTRI **ASHISH RATHI** AYUSHI HALDIA AYUSHI NAMA HIMANSHU MATHUR JAGDEESH SEERVI KARTIK SHARMA RAJAT GARG SHUBHI JAIN • UMANG MATHUR VEERANGANA VIDHIKA MATHUR VINOD KR. GILL VIPUL TIWARI AJEET SONI

<u>Alumni News</u>



Mr. V. K. Jaiswal

Batch: 2000-2004 Branch: ECE

Success Story:

Initial year of my professional life in Bangalore as a Research Scientist, I have been involved in developing Electronic Warfare (EW) Suite for Fighter Aircraft. We have successfully developed the EW Suite for India's First Indigenous Fighter Aircraft LCA Tejas. Further, after transfer to Dehradun, I have been given responsibility of design & development of Software Defined Radios (SDR) for Indian Navy. We have developed SDRs of various form factors, so that it can used at different platforms used in Navy. This work is in final stage of completion.

<u>Alumni News</u>



Message to Juniors:

Hello Friends,

Keep your aim high and fix it as soon as possible. All your effort during the college time should be in the direction to achieve the final Aim. Make a balance in professional & personal life. If you have any hobby, keep it alive and spend some time for it also. It gives you joy & satisfaction in life. Never get dishearten due to failure. Just restart with new energy & move ahead.

> Regards V. K. Jaiswal Scientist, DEAL, Defence R & D Organization, Min. of Defence, Govt. of India, Raipur Road, Dehradun - 248001

Engineering Entrepreneur

J-NEST SOAPBOX 2017

"When education sees its course, a dream its opens eves" J-NEST- Incubation centre has come up with their initiative to support and nurture the budding entrepreneurs of the college. The vision of J-NEST is build where environment an to students instead of being job seekers become job creators. J-NEST has completed it's one glorious year trying to convert innovative ideas into reality. In continuation of leading a glorious journey, J-NEST organized an event "SOAPBOX" in which more than 10 start-ups of the college shared their journey of being job creators. All the running start-ups shared their journey, their ups and downs, experiences and their business model, so that budding talent can get inspired. There was a great and positive response from students and the management team of the college who attended the event.







TEDxJECRC

25thMarch2017

ABOUT TEDX JECRC 1. (25th March 2017, Auditorium A-Block)-TEDx JECRC was, an 2. international event themed "DISCOVER SOCIETY". The aim was to bring the WORTH **IDEAS** SPREADING to the handpicked intellectual students of JECRC who would take inspirations ideas those from and change the world for good.

TEAM TEDxJECRC

Teacher In charge – Mr Anshul Mittal (SDO JECRC)

Organiser and Licensee-Mr Shubham Gupta (IV MECH)

Team- Heamnt Khandelwal (CSE), Simran Bhatia (ECE), Hanu Rohit (ECE), Vidushi Gaur (ECE), Kapil Bimdal (EE), Charu Upadhyay(ECE)

SPEAKERS

- RNK Bamezai- Scientist and Padma Shree
- Reena Puri-Chief editor Amar Chitra Katha
- 3. AjaitaShah- Social Entrepreneur
- 4. Anuja Kapur- Criminal Pyschologist
- 5. Nitin Mirani-International Stand up comedian
- 6. Nina Nayak Child right activist
- 7. Ritu-Acid attack survivor
- 8. Nandita Venkatesan- TB survivor
- 9. Paresh Gupta- Mentor, entrepreneur
- 10. Manisha Gulyani- Internationally acclaimed dancer



Student Articles

The Sixth Sense Technology

The sixth sense technology is a beginning of new era; An era where the need for hardware is minimized. This technology was developed by Steve Mann. It is a blend of many exquisite technologies which include hand gesture recognition, image capturing and manipulation. The sixth sense prototype is made using very common and easily available equipments like projectors, colored markers, camera etc. Being an easily accessible technology, it holds wide scope in future and opens gate for further development in this field.

-Ajay Agarwal II Year



Memristor

It is a microscopic component that can remember electrical states even when turned off. Memristor potents include applications in programmable logic signal processing neutral networks, control system, reconfigurable computing, brain computer interfaces and RFID. Memristive devices are potentially used for stateful logic implication, allowing a replacement for CMOS – based logic computation.

-Arpit Singhal

II Year



Spintronics

Spintronics investigates control and manipulation of the electron spin in metals and semiconductor applications using spin-polarized electrical injection have shown threshold current reduction and controllable circuit only polarized coherent light output. Examples include semiconductor laser. Future applications may include a spin based transistor having advantages over MOSFET DEVICES such as steeper sub-thresh hold slope. -Ashish Agarwal

II Year



charge

spin

Silvernano-particle: Transparency

Silver nano-particles are embedded in the transparent particles, these tiny particles can be tuned to scatter only certain wavelength. Visible light does not belong in this spectrum hence the scattering allows the projected image to be seen in much the same way as smoke in the air reveals the presence of laser beam passing through it. Which means that the glass remains transparent enough to see colors and shapes clearly through it while single color display is clearly visible on the glass.

-Ankit Sankhla

II Year





Interesting Facts

1. Black-market radio- During World War II, the radios used by the forces were heavy and erratic, and not designed for jungle warfare. Kilby wanted to improve the situation and travelled to Kolkata, India, for a truckload of black-market radio parts. Soon, he succeeded in building smaller, more reliable radios for the troops. His invention of integrated circuit stems from this attitude, "If something does not meet your requirements, rebuild."

2. Monophobia means NO-MOBILE-PHONE- PHOBIA.

- 3. If you put a lit match in your microwave and turn it on you van create a plasma ball or balled lightning.
- 4. There are fake Apple Stores in China. Some of them are so convincing, even the staff thinks they are working for Apple.
- 5. 95% of people feel uncomfortable if the TV volume is an odd number.
- 6. Hard Disk are so sensitive to vibration that even screaming at them diminishes there performance.



To be continued....

Department of Electronics and Communication Engineering

