ELECTRONICS ENGINEERING DEPARTMENT

SOCIETY FOR ELECTRONICS EXPLORATION & DEVELOPMENT

SOCIETY FOR ELECTRONICS
EXPLORATION AND DEVELOPMENT

2016-2017

DEPARTMENTAL MAGAZINE

AND

ANNUAL REPORT

INSTITUTE OF ENGINEEERING AND TECHNOLOGY, LUCKNOW

COORDINATORS' NOTE

SEED

ANKITA ANAND

First of all, I would like to express my deepest gratitude towards the management and all chairpersons for believing in me and selecting me as the Coordinator for the celebration of SEED Society's first ever major event, in the form of a 3-day long euphoria based primarily on technological and electronic advances titled Ankuran.

Ankuran was especially organised to publicly announce the launch of Society for Electronics Exploration and Development (SEED) of the Electronics Dept. at Institute of Engineering and Technology, Lucknow. Having such a society was always a dream mainly because of lifting our spirits high and more so because I always wanted to do something for the upcoming juniors.Always wished to provide them a platform open for discussions, worlshops and contests that'd go a long way in shaping their lives. This is one of the few registered socities at the institute and has seen remarkable growth since its official inception.

Ankuran went for 3-days at the premises of the Electronics Dept, after the opening ceremony and Saraswati puja graced by all faculty and staff members. It focused majorly on the Robotics Events- RoboSoccer, RoboWar, RoboSaviour etc which acted as a big boost and platform for the first year students. And this be told, that the second and third year students also arranged for a 45-days workshop to equip the juniors with the necessary knowledge and relevant training to construct their own bots and vie with one another. Alongside this, Ankuran organised a series of informal and other events that tested the contestants on their Coding acumen, Circuit designing, confidence and of course the fun quotient.

But I can't let this close without thanking some important people who have helped in making this dream come true and all those people who made the event a success.

First of all, I would like to thank the College Administration and concerned authorities for providing with the much-necessary permissions and date slots for the event.

I would then like to thank the organisers and the planners who not only planned and organised this event, but also executed everything with so much of passion and zeal. These people of the team owe majority of the success of this event.

I also can't let the participants who performed during the days of Ankuran, go without receiving accolades from me, or the whole coordinating team. I'd also like to thank the visiting audience of esteemed faculty members for their watchful appreciation and essential criticism of the event. Mediapersons from certain newspapers are to duly be acknowledged for their coverage of the event.

I finally would like to use this platform to express my heartfelt gratitude towards the Head of Department of EED for his support in all our ventures and for being a constant support.

I wish for the best of all newly admitted students and believe that they should never fall short of opportunities to learn and grow and that SEED shall function to the best of its capabilities.

PRABAL SINGH

To organise an event, and to lead a crowd have always been challenging tasks for any individual, same goes for me. Ankuran, the annual inter-collegiate Technical and Entrepreneurship festival organised by the Society for Electronics Exploration and Development (SEED), of the Electronics Engineering Department, IET Lucknow was launched with the aim of developing interest and encouraging innovation in technology among students of the institute. SEED – The Society for Electronics Exploration and Development was launched with the basic vision to provide sufficient opportunities to learn and grow for the students who showed enthusiasm and rigour in the field of advanced robotics. It also pursues major innovative breakthroughs through the methods of proper teaching, experimentation and research. To further assert to this, the department decided to organize a 3-day technical festival that would involve participation of the maximum number of students with focus mainly on robotics events, alongside running other formal and informal ones as well amongst which, Code Rush, Circuit Design and Photography were the major highlights. Ankuran also brought with itself Tech Paper Presentation for the students of IET to showcase their ideas and put up their confidence and literary prowess on the show.

I have been a part of other college happenings as well, but here at SEED, It always felt like home. To being presented with a chance to do something everlasting and worthwhile for the department where we hone ourselves during our college years, is always a delight apart from an exemplary learning experience. I deeply acknowledge the HoD , senior faculty members and staff members for instilling their confidence in me to carry out my duties with honesty and diligence.

I also remain highly thankful to my seniors for their unparalleled support and guidance throughout the course of Ankuran without which, our plans had no chance of reaching to their completion.

Regarding the organization and conduct of the fest, it was a roller-coaster ride but we all ended up with good memories and lifelong lessons. On that note, I would express my regards to all the team members , our sponsors, media persons for ensuring a smooth run of the first edition of Ankuran, the annual technical fest of Electronics Dept, IET Lucknow.

The four years of engineering teach us a lot. Apart from academic knowledge, they act as a source for all the invaluable experiences we get from meeting new people, the skills of time management and judicial use of resources while simultaneously, these years develop our personalities and prepare us for the challenges to come. As seniors, we try to incorporate in our juniors the knowledge, understanding and scientific acumen that we collect in this phase of life.

I'd once again like to thank all my teachers, administrative staff, fellow classmates, seniors and juniors for this opportunity to serve you all in whatever way I could possibly do.

I wish and pray that the SEED Society, the Electronics Dept. and IET Lucknow as a whole scales new heights with each passing day and contribute positively to the society and influence lives emphatically.

SEED

FROM THE EDITORS

Ideas that stay in the brain, are ideas not worthy. Carrying out remains the real essence of any great
thought. Beleiving so,
We, hereby present the annual official student-publication of the Electronics Engineering Departmnet of
Institute of Engineering and Technology, Lucknow
Each year, our team of editors, designers, photographers, and correspondents, in addition to generating
creative content from the student population, work extensively to report on events in and around the
college. The final publication reflects and encompasses the diversity inherent to the academic and extra-curricular spaces in EED, – we have in the past, included sections in various on the infrastructure, annual
activities reports, message of the convener and Head Of Department alongwith any article/artwork by the student community.
And behind this beautiful culmination of ideas is a team that gave this publication their all, innovative
ideas, consistent efforts and all that was asked out of them. I highly acknowledge their support in forming
this document as an article of the diligence that the department stands for.
The primary focus of this magazine has been geared at covering events and notable issues within the
college, as well as of current events, popular culture, and academics.
The magazine continues to expand its reach to achieve its vision of being a truly representative student
publication. The magazine also covers the students who've been rank holders at examinations of national
repute.
This document from the students, for the students with its timely release is the result of the undying
hard work and dedication that the crew possesses.
The team hopes to build on this ethos just as much during the upcoming academic years.

-AYUSH KRISHNA PRABALSINGH

2016

ANNUAL

REPORT

में भी होनहारों ने फहराया सफलता का

ग्रेजुएट एप्टीट्यूड टेस्ट इन इंजीनियरिंग 'गेट' 2017 में मांटी को चौथी रैंक, आईईटी में खुशी की लहर

कामयाब छात्रों ने कहा- नियमित प

The accordance of electronics with the wonder that human brain is, is what the world reckons as the flagship to future. Electronics, an indispensable part of technical education in the modern scenario still remains a field that has not been discovered to its full potential, and it thus becomes imperative to continuously strive for improvement and up gradation in the curriculum and methodology followed.

The Electronics Engineering Dept. at IET Lucknow was established soon after the institute took roots in 1984 to venture into this diverse field and produce quality engineers through the methods of practical education and rigorous academic training.

Two separate branches namely "Electronics and Communication" and "Electronics and Instrumentation" are run by the department under able faculty members aided with practical simulation laboratories to impart quality education. The department currently operates under the able leadership of Dr. Prof.Subodh Wairya.

Society For Electronics Exploration And Development (SEED)

With the vision in mind to grant education of the highest quality to the students currently studying in the electronics department of Institute of Engineering And Technology, Lucknow, the SEED Society was established. It took root in the year 20__ and has been nurturing young brains ever since in developing a comprehensive approach towards the learning of robotics and advanced circuitry.

The society involves pursuing career-oriented activities and courses that develop an individual to take on the fierce competition of the corporate world.

Introductory Session
5ᵗʰ October 2016
The day was to welcome the fresh batch of students enrolled in the EC & EI branches for which a customary Saraswati Puja was conducted followed by the introductory session of the freshmen to their seniors, faculty members and other staff members of the environment. It went on as an interactive fun-filled session where students were encouraged to showcase their talents and overcome their fears.

Students were also explained about their curriculum for their college years and what prospects Electronics Engineering holds in the time to come.

Infrastructure and Laboratories
Owing to the fact that the Institute is located in a region where day-to-day industrial interaction is not feasible, the latest equipment is provided in the laboratories itself to ensure that the students are kept abreast of the newer technologies being used in the industry. The department has established laboratories in collaboration with Multi-national companies like Xilinx Inc., Texas Instruments. The department has a well-supplemented set of the following laboratories:
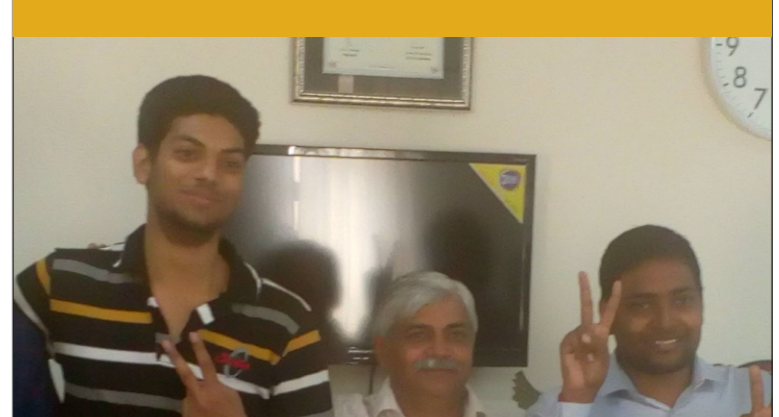
Electronics Engineering LaB
PCB & Workshop Design Lab
Analog Electronics (Linear Integrated Circuits) Lab
Digital Electronics Lab
Microprocessor Lab
Micro-controllers Lab
Embedded Systems Lab
CAD Lab
Control Systems Engineering Lab·
Communication Engineering Lab·
Advanced Communication Engineering Lab
Microwave Engineering Lab
Optical Fiber Communication Lab
Digital Signal Processing Lab
Electronic Measurement & Instrumentation Lab
Transducer & Sensor Lab
Industrial Instrumentation & Control Lab
Analog Signal Processing (Microelectronics Circuit Design) Lab   VLSI Lab

Workshop
20ᵗʰ February 2017- 5ᵗʰ April 2017 Students here at the Electronics Department, are not only imparted academic knowledge, but also virtues of selflessness, sharing and support. Owing to which, the third and second year students conducted a 45-days workshop for the first year students, sharing their practical approach, experience and adeptness in much relevant topics such as-
· Manual Robot
· Autonomous Robot
· Embedded Systems
· RC Plane (Aero Modelling)
· Robot Operating System
· Internet Of Things
· Artificial Intelligence
This led to the students building self-designed, self-constructed robots for various technical contests on both intra and inter-college levels.

Ø Competitive Examinations
Apart from providing an all-round development of the individuals, the department also provides enough resources, time and liberty to the students to prepare rigorously for national level competitive examinations. To mention, we had huge success in Graduate Aptitude Test Engineering(GATE)'17 with rank holders under the top 100 performers all over the country. Namely-
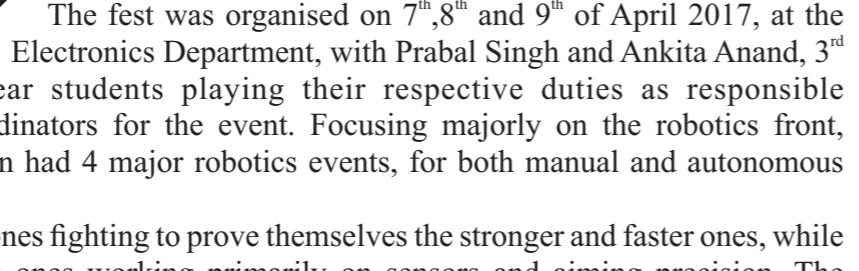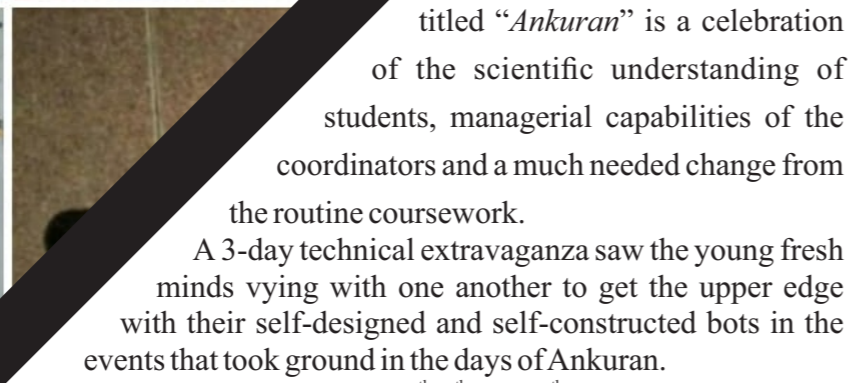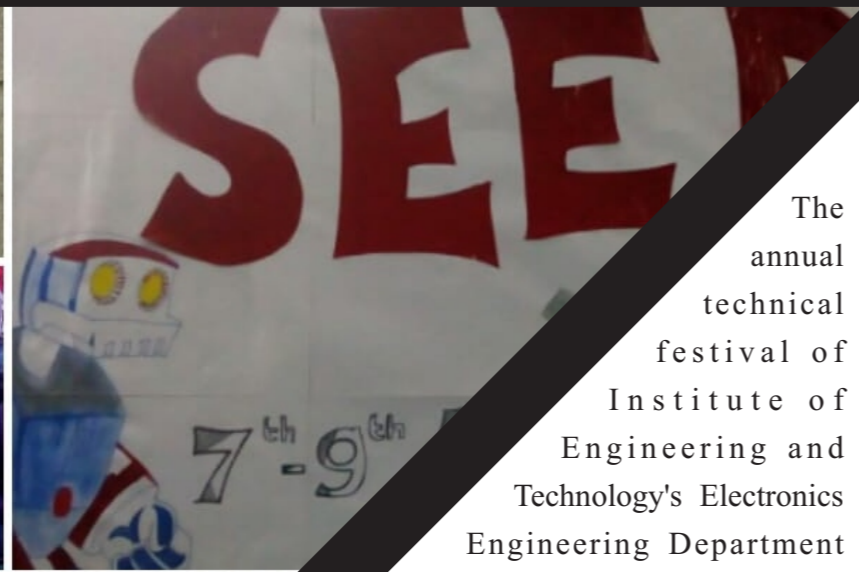· AIR-4 Monti Aggarwal
· AIR-18 Vipin Shukla
· AIR-20 Saurabh Pandey
· AIR-28 Anubhav
· AIR-113 Ashish Jaiswal
There also have been splendid performances in the Common Admission Test (CAT)'16 to get into the top B-Schools of the country.

➢ Event Management
Students of the Electronics Engg. Dept. continue bringing laurels to their mentors. As a testimony of the same, Prabal Singh of 3ʳᵈ year, EI coordinated IET's annual cultural fest

ENCORE'17 with Aastha, another student of 3ʳᵈ year,EI playing the role of General Secretary for the festival. Under their able leadership, the institute witnessed the best till date version of the festival.

Alongside this, the going-to-be Electronics Engineers participate whole-heartedly in all college activities and vie for being the best.

Department of Electronics Engineering

The annual technical festival of Institute of Engineering and Technology's Electronics Engineering Department titled "*Ankuran*" is a celebration of the scientific understanding of students, managerial capabilities of the coordinators and a much needed change from the routine coursework.

A 3-day technical extravaganza saw the young fresh minds vying with one another to get the upper edge with their self-designed and self-constructed bots in the events that took ground in the days of Ankuran.

The fest was organised on 7th, 8th and 9th of April 2017, at the Electronics Department, with Prabal Singh and Ankita Anand, 3rd year students playing their respective duties as responsible coordinators for the event. Focusing majorly on the robotics front, Ankuran had 4 major robotics events, for both manual and autonomous bots.

The manual ones fighting to prove themselves the stronger and faster ones, while the autonomous ones working primarily on sensors and aiming precision. The RoboSoccer Matcheswere the major highlight and grabbed the loudest cheer as teams of two played the attacker and defender to score the maximum goals.

After completion of the competition rounds, the winning junior team got a chance to contest against their mentors as well and to everyone's surprise, emerged winners as well.

Not just robotics, Ankuran is remembered as a celebration of events of other confines as well, wherein, the informals ones are-
· LAN Gaming, · Poker, · Develish Dart, Robo Messenger, C Marvel Quiz, And others, of the technical sort, namely-
· Code Rush, Decode The Code, Aptitude Test
· Photography Contest, · Electronic Circuit Design
· Tech-Paper Presentation

T o elevate the level of understanding students possess, upon various significant topics of the current scenario, Tech Talks were conducted by knowledgeable individuals, excelling in the field. The topics under discussion were-
· Internet Of Things
· Artificial Intelligence
· Robot Operating Systems
· Embedded Systems

ANKURAN

INCUBATING CREATION SUSTAINING FUTURE

रोबो फाइट ने किया सबको रोमांचित

लखनऊ (ब्यूरो)। इंस्टीट्यूट ऑफ इंजीनियरिंग एंड टेक्नोलॉजी (आईईटी) में चल रहे टेक्नो फेस्ट 'अंकुरण' के दूसरे दिन शनिवार को सर्वाधिक आकर्षण का केंद्र रोबो सूमो प्रतियोगिता रही। इसमें 16 टीमों के रोबोट के बीच फाइट ने सबको रोमांचित किया। प्रतियोगिता का फाइनल रविवार को होगा। कार्यक्रम की शुरुआत मेज रनर प्रतियोगिता से हुई। इसमें विभिन्न टीम के रोबोट ने भूल-भुलैया से निकलने की कड़ी कवायद की। वहीं, वाइल्ड शंकर में रोबोट ने जमकर फुटबॉल खेला। पहले वर्ष के विद्यार्थियों के बीच टेक कोड का

आयोजन किया गया ताकि वे तकनीकी की नई भाषाओं से अवगत हो सकें। लैन गेमिंग में काउंटर स्ट्राइक और फीफा को लेकर भी छात्रों में काफी उत्साह रहा। पेन फाइट, हाऊ टू डू इन वन मिनट, पोकर और डेविलिश डार्ट में भी विद्यार्थियों ने बढ़-चढ़कर भाग लिया। विभागाध्यक्ष प्रो. सुबोध वैरिय, विद्युत विभागाध्यक्ष प्रो. कुलदीप सहाय, डॉ. अनुराग त्रिपाठी ने भी फेस्ट में शिरकत की और एक प्रतिभागी के रूप में खूब एंजॉय भी किया। तीन दिवसीय फेस्ट का समापन रविवार को होगा।

आईईटी के टेक्निकल फेस्ट 'अंकुरण' का दूसरा दिन

रोबोट की नई दुनिया से रूबरू करा टेक्नो फेस्ट 'अंकुरण' विदा

लखनऊ (ब्यूरो)। इंस्टीट्यूट ऑफ इंजीनियरिंग एंड टेक्नोलॉजी (आईईटी) में चल रहे टेक्निकल फेस्ट 'अंकुरण' के आखिरी दिन रविवार को विभिन्न रोबोटिक्स प्रतियोगिताओं के फाइनल राउंड हुए। इनमें रोबो सूमो, मेज रनर, वाइल्ड शंकर और रोबो सॉकर में क्रमशः टीम सेबी, डिसेक्टिकॉन, जगरनॉट व जगरनॉटस विजेता रहीं। वहीं, तकनीकी प्रतियोगिता सर्किट डिजाइन और कोड रश के विजेता प्रथम वर्ष के प्रत्युष और लक्ष्य की टीम रही। लैन गेमिंग में काउंटर स्ट्राइक के विजेता कंप्यूटर साइंस द्वितीय वर्ष के छात्र रहे। ऑनलाइन प्रतियोगिता डिकोड द कोड के विजेता प्रथम वर्ष के इंतेजा अली रहे। वहीं, आखिरी दिन प्रथम वर्ष के विद्यार्थियों के लिए टेक टॉक का आयोजन किया गया। इसमें प्रख्यात जावा डवलपर शाहब अहमद खान ने उन्हें एंड्रायड से म्यूजिक प्लेयर बनाना सिखाया। साथ ही भावी इंजीनियरों ने पेन फाइट, हाऊ टू डू इन वन मिनट और पोकर प्रतियोगिताओं में बढ़-चढ़कर शिरकत की। वरिष्ठ अध्यापक डॉ. बीके सिंह और विभागाध्यक्ष प्रो. सुबोध वैरिय ने विजेताओं को पुरस्कृत किया।

अंकुरण में दिखा छात्रों का टेलेंट

Thus, the three days of Ankuran went as an affair of absolute delight for all newly admitted students, giving them a detailed understanding of the operations and conduct Electronics Engineering Department along with its senior faculty members. The event finally concluded on the evening of 9th April 2017 with a thanksgiving speech by the coordinators.

In all, Ankuran'16 is remembered as an event that was diligently organized.

There was a soul to it. A soul that was vibrant, contagious and exuberant.

ANKURAN