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# WHATS INSIDE

- 1. Industrial Visit to ALT-TC Gzb
- 2. Seminar on Thalassemia
- 3. Departmental Achievements
- 4. TATVA-2k19
- 5. Guest Lecture on Condition Monitoring & Prognosis of Ranway Tracks
- 6. Diwali Celebration
- 7. Faculty Technical Corner
- 8. Student Technical Corner
- 9. Alumni Speak
- 10. Brain Teasers

## INDUSTRIAL VISIT TO ALT-TC, GHAZIABAD

Advanced Level Telecom Training Centre (ALTTC), Ghaziabad is the apex training institute of BSNL.ALTTC was set up as a joint venture of International Telecommunication Union, Geneva, UNDP and the Government of India in 1975. ALTTC functions on the frontiers of telecom technology, finance and management and imparts training to the leaders in the business. The strength of ALTTC lies in the state of art labs, massive infrastructure and trained, talented and qualified human resource pool.

Industrial Visit to ALT-TC Ghaziabad was planned for the students of 2<sup>nd</sup> Year and 3rd Year. A total of 80 students visited the ALT Campus on 1<sup>st</sup> October 2019. Ms. Anamika Gupta, Ms. Riju Jindal and Ms. Hashmat Usmani coordinated the visit.

The students visited the Satellite Communication and Optical Fibre Labs. The students were benefited by the practical exposure of Communication Technologies.



# SEMINAR ON THALASSEMIA

A seminar to create awareness of Thalassemia was conducted on 28<sup>th</sup> November 2019. This seminar was organized in association of Rotary Club of Ghaziabad Rajdhani.



Thalassemia is an inherited (i.e., passed from parents to children through genes) blood disorder caused when the body doesn't make enough of a protein called hemoglobin, an important part of red blood cells. When there isn't enough hemoglobin, the body's red blood cells don't function properly and they last shorter periods of time, so there are fewer healthy red blood cells traveling in the bloodstream.

Red blood cells carry oxygen to all the cells of the body. Oxygen is a sort of food that cells use to function. When there are not enough healthy red blood cells, there is also not enough oxygen delivered to all the other cells of the body, which may cause a person to feel tired, weak or short of breath. This is a condition called anemia. People with thalassemia may have mild or severe anemia. Severe anemia can damage organs and lead to death.

This seminar was very beneficial for the students and faculty. Dr. Himani Mittal coordinated this program.

## DEPARTMENTAL ACHIEVEMENTS

- 1. Ms. Neha Goel attended a 1 day workshop on IPR at AKTU, Noida on 1st Oct 2019.
- 2. Following students of the Department got placed in Vivo Mobile India Pvt. Ltd.



3. Following students of the Department got placed in Tata Consultancy Services.



4. Following students won prizes in various Inter College and National events.

S.No.	Name of Student	Event Name	Venue	Status
1	Bhavya Pathak	TATVA 2k19 (Inter College Street Play Competition)	RKGIT,Ghaziabad	Runner Up
2	Rishabh Ladhani	TATVA 2k19 (Inter College Street Play Competition)	RKGIT,Ghaziabad	Runner Up
3	Disha Srivastava	Scrolls'19 (National Level Technical Paper Presentation Contest)	AKGEC,Ghaziabad	Runner Up
4	Mansi Singh	Scrolls'19 (National Level Technical Paper Presentation Contest)	AKGEC,Ghaziabad	Winner
5	Piyush Mishra	Scrolls'19 (National Level Technical Paper Presentation Contest)	AKGEC,Ghaziabad	Runner Up
6	Kumar Gaurav Shrivastava	Scrolls'19 (National Level Technical Paper Presentation Contest)	AKGEC,Ghaziabad	Runner Up



TATVA'19 the annual tech fest of RKGIT held during 3rd-5th October, 2019 was a great success and a bigger milestone for our college. A total of 45 events were organized out of which for 6 events. the very first time RKGIT opened its doors for other colleges. Under the cultural council, Group dance and Street Play, under the literary council, Parliamentary Debate and Business Plan, under hobby council, Lan Gaming and Robo-war were the events that saw a participation of 10+ colleges of Delhi-NCR Circuit.

On the last day of this Mega Event there was a stunning performance by Bollywood Singer Gajendra Verma and DJ Zydec. The detailed article on TATVA 2K19 has been published in our previous edition.



### Guest Lecture on Condition Monitoring & Prognosis of Railway Tracks

A guest lecture on "Guest Lecture on Condition Monitoring and Prognosis of Railway Tracks" was organized in the institute on 19/10/2019. The resource person and the key note speaker was Dr. Andrew Keong Ng from Singapore Institute of Technology, Singapore. Dr. Andrew Ng is an Associate Professor with Singapore Institute of Technology.

He is the Deputy Programme Director of the BEng (Honours) and MEngTech in Sustainable Infrastructure Engineering (Land), which focuses on railway engineering and total preventive maintenance. He is a Chartered Engineer with the UK Engineering Council and serves on the committees of various local and international professional engineering institutions, such as Institute of Electrical and Electronics Engineers (IEEE), Institution of Engineers Singapore (IES), Institution of Engineering and Technology (IET), and Institution of Railway Signal Engineers (IRSE). He is a Senior Member of IEEE and IES, as well as a Consultant and Advisor to startups and multinational corporations.

Railway transportation is a common mode of moving people, animals, and goods from one place to another. Condition monitoring and prognosis are essential to improve railway reliability, availability, maintainability, and safety. They also provide good basis for effective asset maintenance and management, thereby reducing downtime and maintenance costs.

The keynote presentation elaborated the concept and importance of condition monitoring and prognosis, particularly of railway track including track geometry and rail defects, which play a critical role in railway safety. Different railway track condition monitoring and prognostic methods and technologies that are available in academia and industry were also discussed. Lastly, future developments in this area were highlighted.

The coordinator of this programme was Dr. Puneet Chandra Srivastava.



# DIWALI PARTY

Every autumn, the observance sees millions of people attend firework displays, prayer services and festive events in celebration of the occasion.

While Diwali holds significance for a variety of reasons, one of the core themes of the festival, as symbolised by the prevalence lights, is the triumph of good over evil.

Diwali, also known as Deepavali or Dipavali, comes from the Sanksrit word *deepawali* meaning "row or series of lights".

A Diwali Party was organized in the Department on 24<sup>th</sup> October 2019. It was a very delightful experience and the faculty members enjoyed a lot on this occasion. Several games like Tambola, Musical Chair, Engilish Hindi counting were played by the faculty members.

Dr. DR Somashekar, (Director) distributed diwali gifts and prizes to the various faculty members. The coordinators of this programme were Ms. Anamika Gupta, Ms. Richa Gupta, Ms. Charu Tyagi.





## FACULTY TECHNICAL CORNER

The Internet of Things (IoT) is the network of physical objects—devices, vehicles, buildings and other items embedded with electronics, software, sensors, and network connectivity—that enables these objects to collect and exchange data.



IoT applications are expected to equip billions of everyday objects with connectivity and intelligence. It is already being deployed extensively, in various domains, namely:

- ✤ Wearables
- Smart Home Applications
- Health Care
- Smart Cities
- ✤ Agriculture
- ✤ Industrial Automation

Mr. Anil Verma (Asst. Professor, ECE)

Oct-Nov Vol-5 Issue-6

Page 9

## STUDENT TECHNICAL CORNER

#### AMOLED (ACTIVE-MATRIX ORGANIC LIGHT-EMITTING DIODE)

AMOLED (active-matrix organic light-emitting diode, is a display device technology used in smartwatches, mobile devices, laptops, and televisions. OLED (organic light-emitting diode) describes a specific type of thin-film-display technology in which organic compounds form the electroluminescent material, and active matrix refers to the technology behind the addressing of pixels.

Since 2008, AMOLED technology has been used in mobile phones, media players and digital cameras, and it has continued to make progress toward low-power, low-cost, high resolution and large size (for example, 88-inch and 8K resolution) applications.

An AMOLED display consists of an active matrix of OLED pixels generating light (luminescence) upon electrical activation that have been deposited or integrated onto a thin-film transistor (TFT) array, which functions as a series of switches to control the current flowing to each individual pixel.

Typically, this continuous current flow is controlled by at least two TFTs at each pixel (to trigger the luminescence), with one TFT to start and stop the charging of a storage capacitor and the second to provide a voltage source at the level needed to create a constant current to the pixel, thereby eliminating the need for the very high currents required for passive-matrix OLED operation.

TFT backplane technology is crucial in the fabrication of AMOLED displays. In AMOLEDs, the two primary TFT backplane technologies, polycrystalline silicon (poly-Si) and amorphous silicon (a-Si), are currently used offering the potential for directly fabricating the active-matrix backplanes at low temperatures (below 150 °C) onto flexible plastic substrates for producing flexible AMOLED displays.



Manufacturers have developed in-cell touch panels, integrating the production of capacitive sensor arrays in the AMOLED module fabrication process. In-cell sensor AMOLED fabricators include AU Optronics and Samsung. Samsung has marketed its version of this technology as "Super AMOLED". Researchers at DuPont used computational fluid dynamics (CFD) software to optimize coating processes for a new solution-coated AMOLED display technology that is competitive in cost and performance with existing chemical vapor deposition (CVD) technology. Using custom modeling and analytic approaches, Samsung has developed short and long-range film-thickness control and uniformity that is commercially viable at large glass sizes.

Kinjal Sinha ECE,4th Year

# ALUMNI SPEAK

RKGIT has played a very crucial role in shaping my career. Faculty imparted great values in me which made me ready for the outside real world. Through out the course, the faculty were very supportive and inspiring. It's vision of shaping lives through quality education makes it stand tall apart from the other institutions. I must say RKGIT is one of the finest college in its cadre and I feel proud to be graduated from this college.



It would be difficult to sum up four years of RKGIT in just few lines. I must say that the learning and exposure which RKGIT gives is just commendable. I feel RKGIT is the wholesome basket for one who is looking to pursue Bachelors in Technology and I'll definitely cherish these moments forever.

> Shubhangi Dubey Software Developer (United Health Group, Hyderabad) Batch : 2015-2019

# BRAIN TEASERS

- 1. You have 10 boxes of balls (each ball weighing exactly10 gm) with one box with defective balls (each one of the defective balls weigh 9 gm). You are given an electronic weighing machine and only one chance at it. How will you find out which box has the defective balls?
- 2. Eye Test How many squares?



3. Solve this in a minute by filling in the boxes.





4. Glass and water puzzle, how fast can you solve it?

5. If FROG = 719168, then TRIP = ?