



# NEUTRALIZE

A DEPARTMENT E-NEWSLETTER



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# INDUSTRY VISITS

## *“Science City Visit”*

**Agenda :** To draw more students towards education in science

**Date :** 05/03/2019

**No. of faculties involved :** 02

**No. of Participants :** 54

**Session Conducted by :** Mr.Vijay Singh and Mr. Nikhil Sharma

**Session Conducted under :** NEEM Tree Club (NTC)

**Location :** Gujarat Science City, Hebatpur

**Session Brief :**

Gujarat Science City, located in Hebatpur, Ahmedabad, is part of a government initiative to draw more students towards education in science. The center hosts an IMAX 3D theatre, an energy park, a hall of science, Planet Earth, an amphitheater, Life Science Park and dancing musical fountains among others. There are many buildings in science city to display and demonstrate different concepts, out of which students visited &quot;Hall of Space & Science&quot; and &quot;Planet Earth&quot;. In Hall of Space & Science, the information displayed was about space science, scientists and working models of some experiments. In the same dome, all the students along with faculties watched one play and one short documentary on galaxy and life in outer space. After taking lunch at canteen of Science City, students visited &quot;Planet Earth&quot; whose building exterior itself shows earth map. There were different kinds of simulators to experience like &quot;Coal mine&quot; and &quot;Earthquake&quot;. All the students and faculties went to have experience of &quot;Earthquake” simulator. There are lots of things at science city to learn from and students gained a lot of knowledge by this visit.

## ***“Visit to Kiri Industry”***

**Agenda :** To correlate the theoretical knowledge gained during the academic session with the current industrial innovations.

**Date :** 26/03/2019

**No. of faculties involved :** 02

**No. of Participants :** 57

**Visit Coordinated by :** Mr. Mohammad Imran, Mr. Pithiya Lakhamanbhai

**Visit Conducted under :** Chemical Engineering Program

**Location :** Kiri Industries

**Session Brief :**

The industrial visit was organized by Chemical Engineering Program, coordinated by Mr. Mohammad Imran (Assistant Professor) and Mr. Pithiya Lakhamanbhai (Assistant Professor) also accompanied the students 57 undergraduate students of all years participated in the event.

Kiri Industries Limited (KIL) is one of the largest manufacturers and exporter of wide range of Dyes, Intermediates and Chemicals from India. KIL, a fully integrated Dyes and Chemicals company is a winner of several CHEMEXCIL and GDMA performance awards. KIL is a preferred resource centre for many of the most extensive product lines in textile dyes. Kiri Industries Ltd. has manufacturing plants for Reactive Dyes with installed capacity of 18000 TPA (tones per annum).

Students visited and saw various sections of the plant such as Spray Dryer, Filter Press, Reverse Osmosis Plant, Effluent treatment plant, etc. There were 2 Spray Dryers which is quite notable and there were several vessels spread out in upstage and downstage pattern. The students were quite fascinated and enlightened as they were able to correlate the theoretical knowledge gained during the academic session with the current industrial innovations. They observed different processes and activities carried out in an industry and realized the importance of safety and the majors required for its fulfilment.

# EXPERT LECTURES

## *“Session on how to do effective Project/PBL”*

**Agenda:** To explain students to make their PBL projects more effective

**Date :** 15/03/2018

**Timings:** 02:00 pm to 04:00 pm

**No. of Participants :** 62

**Session Conducted by:** Mrs. Niharika Nath, Assistant professor, ASOIT

**Session Conducted under :** NEEM Tree Club (NTC)

**Location:** Newton Hall

**Session Brief:**

A session on “How to Do Effective Project/PBL” was organized by NEEM Tree club of Chemical Engineering Department, Aditya Silver Oak Institute of Technology (ASOIT) on 15th March , 2019 i.e. Monday from 2 pm to 4 pm at Newton Hall. As we all are aware of the importance of final-year project and mini-projects in engineering field, it is necessary to create awareness among the students as well regarding the same. The project can be considered as a Problem Based Learning (PBL) where students need to apply and integrate their knowledge and skills to solve an academic task. The bridge between the theoretical aspects and real world is project based learning. Mini projects for engineering students gives an edge over the race of recruitment to work hard to ensure a good career. The session started with a brief introduction regarding the selection of topic by Mr. Mohammad Imran. He discussed the significance of project, difficulties faced by the students in selection of an appropriate topic and the strategy to resolve those difficulties. It was followed by explanation of importance and strategy of literature review by Mr. Vijay Singh. Then, the students were given hands-on training for review of literature by considering a specific example. The session was continued further by Mr. Mohammad Imran who explained the students the methodology for finding research gap and planning of experiments. The interpretation of results and characterization techniques were explained by Mr. Vijay Singh. The students then raised their queries which were resolved by the faculties of the department. Mrs. Niharika Mehta, HOD Chemical Engineering Department briefed about the timeline that students need to follow throughout the semester. The session was attended by all the faculties of Chemical Engineering Department.

Semester 6<sup>th</sup> & 4<sup>th</sup> students in

DWSIM workshop by semester 8<sup>th</sup> students

## ***“Expert Lecture on Cleaner Production Techniques”***

**Agenda**      **Agenda**      : To motivate students to focus on cleaner production techniques after their graduation.

**Date**      : 24/05/2019

**No. of faculties involved**      : 02

**No. of Participants**      : 48

**Session Conducted by**      : Prof. M. G. Desai, LDCE

**Session Conducted under**      : NEEM Tree Club (NTC)

**Location**      : Newton Hall

**Session Brief**      :

An expert lecture was arranged on “Cleaner Production in Chemical Engineering” was delivered by Prof. M. G. Desai, LDCE. The rapid industrialisation of India in the recent past has been the striking feature of Indian economic development. The common indicators of economic welfare, such as national product and income have reflected the growth of the industry as a major indicator for the development of the nation. But the other angle of industrialization has been the serious damage to the surrounding environment due to the wastes and pollutants generated from the industries. The irreparable damage to the surface and ground water, air and soil; the growing emergence of hazardous and toxic wastes from the production processes; the uncontrolled dumping of highly contaminated hazardous wastes or even the growing number of formerly unknown diseases and the over exploitation of natural resources are some of the shocking landmarks of our progress. Cleaner production is a preventive, company-specific environmental protection initiative. It is intended to minimize waste and emissions and maximize product output.

# Departmental activities

## ***“Audio Book Recording”***

**Agenda**      **Agenda**      : To prepare audio book for visually challenged people.

**Date**      : 01/03/2019

**No. of faculties involved**      : 02

**Session Coordinated by**      : Mr. Vijay Singh, Mr. Nikhil Sharma

**Session Conducted under**      : NEEM Tree Club (NTC)

**Location**      : Campus

**Session Brief**      :

An initiative to help the visually challenged people was taken by our department, which included audio book recording on 1st March, 2019. Audio book recording as the name itself suggests involves recording of a book or other work being read loudly. Prior to the recording session, the students were taught how to record an audio book and related information was also shared. The students collected the book from the college and were given a time period in which they have to complete the recording. The recording was done through software shared to them. Many students and faculties showed interest and their work is appreciable.



Every hydrogen atom in your body is likely 13.5 billion years old because they were created at the birth of the universe

### ***“Fire and safety examinations for students and faculties”***

Agenda : To aware students and faculties about the fire and safety facilities available in our campus.

Date : 20/06/2019

No. of faculties involved : 02

No. of Participants : 13  
Session Coordinated by : Mr. Mohammad Imran, Mr. Pithiya

Lakhamanbhai

Session Conducted under : NEEM Tree Club (NTC)

Location : D-104, D-508

Session Brief :

An examination regarding the topic “Fire and Safety” was held un Neem Tree Club on 20th july, 2019. The main aim of this exam was to know whether the students and the faculties are aware about the locations and methods of using the fire safety equipments present in our campus. The exam was of 20 minutes and consisted 15 multiple choice questions based on the campus fire safety arrangements. Students and faculties actively gave the exam and the session was found to be useful.

Session on industrial automation with DCS

Students of semester 5 attending session on DCS



## ***“Tree Plantation”***

### **Agenda**

<b>Date</b>	<b>: 05/06/2019</b>
<b>Timings</b>	<b>: 8:00 am to 10:00 am</b>
<b>No. of faculties involved</b>	<b>: 02</b>
<b>No. of Participants</b>	<b>: 91</b>
<b>Session Conducted by</b>	<b>: Mr. Mohammad Imran, Mr. Pithiya Lakhmanbhai</b>
<b>Session Conducted under</b>	<b>: NEEM Tree Club (NTC)</b>
<b>Location</b>	<b>: Near A- block</b>
<b>Session Brief</b>	<b>:</b>

Our college launched an extensive Plantation Programme on the occasion of the World Environment Day in different parts of our locality. The students and teachers selected the empty places and the roadsides to plant saplings in a well-organized way. The saplings were supplied by the local municipality corporation. In order to restore the eco-balance of the afforestation drive was taken with all seriousness. Participants were highly enthusiastic to make it a big success. The students planted saplings, and fenced them and watered the plants. Every step of the programme was appreciated by the representatives of the administration. The programme created a great stir among the general public too. At the end of the programme the college held a seminar to observe the World Environment Day.

# workshops

## ***“Workshop on Fire Safety”***

### **Agenda**

**Date** : 30/05/2019

**No. of faculties involved** : 02

**No. of Participants** : 86

**Session Conducted by** : Mr. Mohammad Imran, Mr. Pithiya Lakhamanbhai

**Session Conducted under** : NEEM Tree Club (NTC)

**Location** : A- block

**Session Brief** :

Accidents don't come with a warning, hence everyone should be prepared beforehand, and therefore our department has organized a fire safety workshop on 30<sup>th</sup> May, 2019. The workshop focused upon educating students and faculties about various kinds of fire that they could encounter and also taught them various ways of dealing with it. Students were also familiarized with the working of fire extinguishers and were given some easy and livesaving tips that they could easily follow in the case of emergency. The session proved to be informative and a real life saver for everyone.

Students attending DWSM workshop which was organized by students

# DARE TO ANSWER

## *Instructions :*

**ANSWERS OF THIS QUIZ WILL BE PUBLISHED IN NEXT EDITION OF NEUTRALIZE.**

1-What is the source of UV radiation?

- (A) Hydrogen gas discharge lamp      (B) RF oscillator  
(C) Klystron oscillator      (D) Nernst Filament

2-An SN<sub>1</sub> reaction results in:

- (A) Retention      (B) Racemisation  
(C) Inversion      (D) Elimination

3-The structure of sulphur dioxide molecule (SO<sub>2</sub>) may be given as:

- (A) Tetrahedral      (B) Bent  
(C) Linear      (D) Plane triangle

4-The nucleus of an atom consists of

- A.electrons and neutrons B.electrons and protons  
C.protons and neutrons D.All of the above

5-The first diesel engine run on \_\_\_\_\_

- a) Bio diesel b) Regular diesel  
c) Vegetable oil      d) Petrol

6-Fuels cell is an electrochemical device that converts the chemical energy into the \_\_\_\_\_

- a) Electrical energy      b) Mechanical energy  
c) Static energy      d) Frictional energy

7-Which substance can be used as an anesthetic?

- A.Chlorine B.Helium  
C.Carbondioxide      D.Nitrons oxide

**8-Iron pipes are often coated with a layer of zinc to prevent corrosion. This process is termed**

- A.electroplating    B.annealing**  
**C.vulcanization    D.galvanization**

**9-Which substance is produced by Fermentation?**

- A.Chlorine    B.Sulphur dioxide**  
**C.Carbon dioxide    D.Nitrogen dioxide**

**10-Gober gas' contains mainly**

- A.ethylene    B.methane**  
**C.carbon dioxide    D.acetylene**

**11-Rusting of iron is an example of**

- A.rapid oxidation    B.spontaneous combustion**  
**C.reduction    D.slow oxidation**

**12-Excessive consumption of ethanol causes damage to the**

- A.heart    B.lungs**  
**C.kidneys    D.liver**

**13-Enamel ware has a coating of**

- A.red lead    B.glass**  
**C.boro silicates    D.tin**

**14-The substance coated on plastic tape-recorder tapes is**

- A.zinc oxide    B.iron oxide**  
**C.iron sulphate    D.manganese oxide**

**15-Diamond is chemically**

- A.a mixture of metal carbonates    B.pure carbon**  
**C.a pure form of sand    D.a mixture of calcium and magnesium phosphates**

## QUESTION QUEST

If you have any Engineering related curious questions, you can mail us on the mentioned Mail-ID. We will shortlist most interesting questions and answer them in the next edition of “NEUTRALIZE”.

Mail-ID to send your questions

[neutralizenewsletter@gmail.com](mailto:neutralizenewsletter@gmail.com)

What molecules and atoms and electrons are to the physicist and chemist, chromosomes and genes are to the biologist.

— Edwin Grant Conklin