



NEUTRALIZE

A DEPARTMENT E-NEWSLETTER



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DEPARTMENT ACTIVITIES

Solid Waste Awareness Campaign

- **Agenda :**

Silver Oak Group of Institute along with the cooperation with Ahmedabad Municipal Corporation has taken up an initiative to

Spread Awareness among the Amdavadis regarding advantages of separation Dry & Wet Waste. • **Date :** 07th December 2018, Friday

- **Timings :** 09.00 am to 02.00 pm

- **Nos. of Participants :** 120 Students • **Faculty Team :** A Team of 05 + 2 Faculties (Jay, Pratik, Priyank, Priti & Vijay + Mrunalini Ma'am & Sangeeta Ma'am) • **Location :** Chandlodiya + Gota Locality, Ahmedabad

Ahmedabad - The Smart Heritage City is undergoing into a huge Social Transition Change for segregating of Domestic Solid Waste. Silver Oak Group of Institute along with the cooperation with Ahmedabad Municipal Corporation has taken up an initiative to Spread Awareness among the Amdavadis regarding advantages of separation Dry & Wet Waste. The campaign started on 3rd Dec. '18, Monday by going to each 18 Classes of 1st year in both the institute's for awareness regarding the same, along with the search of finding reliable volunteers for working on ground. Surprisingly, 120 students had registered for noble cause till the end of day (62 from SOCET and 58 from ASOIT).

On 5th Dec. '18, Meeting with each volunteered student was held by Mt. Jay Shah for explaining them the details of work as well as some accepted question from Amdavadis. The skill of Public Speaking and Public Attending was taught. Also, Teams were formed and had faculty coordinators were introduced. On the execution day, viz 7th Dec. '18, Friday AMC Solid Waste Incharge had taken up a meeting with the volunteers team and briefed them about the task they are suppose to execute. Chandlodiya and Gota were the localities selected for the awareness. The Teams present an pump workaholic nature on ground and had taken up awareness in 1000+ house hold. This was the first of its kind program for 1st year students to deal directly with the citizen being the technical learners. The session was executed at SOGI Level under the guidance of Ms. Mrunalini Rana and Mrs. Sangeeta Khandelwal.

‘Sainik Seva Fund Collection’

Agenda

: Right from carving out our own country to fighting for it every day at the frontiers, hundreds of martyrs have laid down their lives for us. As a tribute to the fallen heroes of our country, chemical engineering department took this initiative to uplift the families of martyred jawaans of the Indian Army.

Date : 26/01/2019

Timings : 8:00 am to 9:00 am

No. of faculties involved : 03

No. of Participants : 15

Session Conducted by : Neem Tree Club (NTC) Coordinators: Mr. Vijay Singh & Mr. Mohammad Imran

Chemical Department Head: Dr.Sangeeta Khandelwal

Location : In campus

Session Brief :

When a soldier sacrifices his life to protect the nation, their families are often left with little means of financial support. Therefore, the department took this campaign to collect the fund for extending a helping hand towards the families of martyred soldiers.

“Mock Interview”

Agenda **Agenda** **: To prepare the students for job interview**

Date **: 03/11/2018**

No. of faculties involved **: 03**

No. of Participants **: 37**

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

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

Location **: Library**

Session Brief **:**

A Mock Interview was conducted for chemical final year students under the Neem Tree Club. Mr. Vijay Singh, Mr. Pritam Khandale and Mr. Nikhil Sharma were on the panel. The interview was carried out in library. The students were called one by one with their resumes. The main aim was to make the students experience the actual scenario of interviews, to build up their confidence and makes them aware about their mistakes or where they can go wrong when they appear for the final interview. The students actively participated in the interview.

workshops

“Blind people association workshop”

Agenda

Date	: 01/01/2019
Timings	: 10:00 am to 11:30 am
No. of faculties involved	: 04
No. of Participants	: 25
Location	: Newton Hall

Session Brief

:

Chemical Engineering department had organized workshop regarding recording audio book. Blind People's Association is a professional organization which believes in providing equal opportunities to all categories of people with disabilities. Consistent with the philosophy, it works for providing education, employment opportunities, equal rights and quality life for them. Our institute conducted workshops on 1st

Students of semester 5 are participating in this

DCS

January, 19 with experts from Blind Peoples association that helped to understand their needs and how our institute can contribute towards the same. Expert gave some knowledge about various technologies available

like TTS, KNFB reader application, hear to read, E-pub technology, Daisy technology for the recording of the books of different area by different way

Mr. Mrityunjay Kumar teaching about DCS

which will be uploaded to their library from which blind people can access different books. Workshop was mainly foc used on re-cording the book with

Students attending D.W. SM workshop which was organized by students

the help of daisy software. They explained step by step procedure for recording the book. Follow the following steps to recode the audio book with the help of daisy software for visually challenged people

In brief the steps are as follows:

- 1 Open the software**
- 2 Select Create a new project / Open an existing project**
- 3. Give Title name of book**
- 4 Select OK audio SETTING FOR THE PROJECT without any changes in the setting**
- 5 In left side area you can see section here you have to architect your book structure.**
- 6 for add section Ctrl + h**
- 7 for add sub section Ctrl+shift+h**
- 8 in recording area for recording select the panel and press two times Ctrl+R**
- 9 To stop the recording press space**
- 10 To add number first record page number only and then press space and select that particular space and click right click ---- select assign role----- page -----write page number in the dialogue box and press ohk**
- 11 After complete the whole book recording press Ctrl+L**
- 12 After that press Ctrl+E**
- 13 Then opens select standard for accessible book and we have to select Daisy 3**
- 14 Set on your convenience export directory**
- 15 Tick the option of Encode audio files**
- 16 And select mp3**
- 17 and select append section name to audio file name**

Industry Visits

“Visit to R. K. Synthesis”

Agenda

Date : 05/06/2018

Timings : 8:00 am to 10:00 am

No. of faculties involved : 02

No. of Participants : 35

Visit Conducted by : Mr. Pritam Khandale & Mr. Vijay Singh
(Asst. Profs. Chemical Engineering Department)

Location : Newton Hall

Session Brief :

2nd year students of Chemical Engineering Department have visited R. K. Synthesis Pvt. Ltd on Monday 7th of January, 2019. The visit was mainly divided into two sections: first students were shown R&D Labs namely Spectroscopy lab, GC & HPLC Lab, Sample Testing Lab and TSV Spotting Lab. In these labs students were given hands-on exposure for using sophisticated instruments and sample analysis processes. After that students were taken to see plant where they have seen reactor, plate & frame filter press, centrifugal separator, product storage area and Packaging area. Completing the whole visit the students were given Tea & snacks

This visit was very informative. Students have gained practical knowledge regarding dyes and intermediates synthesis. Having the actual practical knowledge will help students to relate the theoretical from reference books.

Expert lectures

“Expert lecture on effective resume making”

Agenda **Agenda** : To prepare students in a way that they can prepare their resume/ curriculum vitae effectively.

Date : 02/11/2018

Timings : 10:00 am to 11:30 am

No. of Participants : 56

Session Conducted by : Mr.Vijaykumar Singh, Assistant professor, ASOIT

Session Conducted under : NEEM Tree Club (NTC)

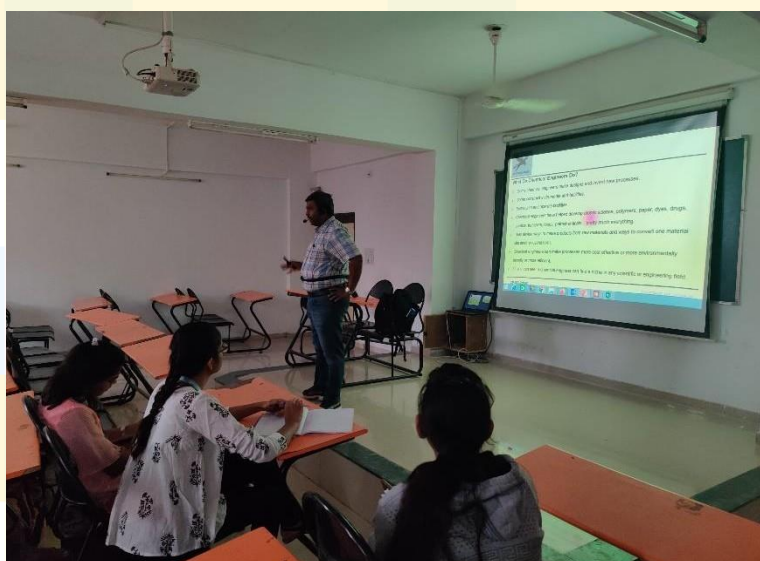
Location : D-505

Session Brief :

An expert lecture on effective resume making was conducted by the Neem Tree Club on 2nd November 2018. The lecture was delivered by Mr. Vijay Singh. The students were given a brief about what is resume and curriculum vitae and what is the difference between resume and CV. What to include in resume and what to include in CV. Also different sample resumes and CVs were shown to them for better understanding. The students were also given time to prepare their own resume so that they can improve their skills. At the end of the session a feedback form was shared to all the students and it turned out to be a very interactive and informative session.



“Knowing without seeing is at the heart of chemistry”



Speaker on Introduction of chemical process industry



Speaker on Introduction of chemical process industry

“Expert lecture on Introduction to process Industries”

Agenda:

Date : 08/1/2019

Timings : 10:00 am to 12:00 am

No. of faculties involved : 02

No. of Participants : 135

Session Conducted by : Mr. Harish Goel and Mr. Narendra Dhunpar

Location : Newton Hall

Session Brief :

An expert talk was organized by chemical engineering department for 2nd, 3rd and 4th year students on 8th January, 2019. Mr. Harish Goel and Mr. Narendra Dhupar form Kamakshi Flexiprints Pvt. Ltd. graced the event with their presence. Mr. Harish Goel is a first generation entrepreneur, is a science graduate with EDP in HR from Nirma Institute and SMEP from IIM Ahmedabad. The Rotogravure printing machine, capable of printing with a cylinder of 1000 mm circumference, was first made in India for BOPP Laminated Fabric Bags, at Kamakshi, by him in the year 2004. His understanding of polymers, their attributes & process ability generated the idea of manufacturing barrier laminates with multi-layered extrusion coating for which the Company has filed for Patent. He is regularly sharing his experience on entrepreneurship and Innovations at various institutes like Entrepreneurship Development Institute - Ahmedabad, National Institute of Design - Ahmedabad, IIM- Ahmedabad and other management colleges in Ahmedabad.

He delivered his talk on “Introduction to Process Industries” which benefited the students in terms of technical and managerial skills required to be a successful process engineer. Moreover, He briefed about the problems being faced by the process industries currently and the optimum solution for minimization of those problems. His talk was mainly based on the packaging and quality assurance of the finished product and challenges being faced by polymer industries. He explained the tests carried out for the quality assurance of the product such as dart impact testing, tensile testing, COF testing, optical density testing and thickness gauge testing. The students raised many queries at the end of the session which were successfully answered by the guest speaker. He also offered the students to visit his industry to have a practical exposure of the activities carried out during production. The program concluded with a vote of thanks.

NEWS: TECH

○ Fossil fuel-based power plants:

- Most methods of removing carbon dioxide from a stream of gas require higher concentrations, such as those found in the flue emissions from fossil fuel-based power plants.
- A few variations have been developed that can work with the low concentrations found in air, but the new method is significantly less energy-intensive and expensive, the researchers say.
- The technique, based on passing air through a stack of charged electrochemical plates.
- The device is essentially a large, specialized battery that absorbs carbon dioxide from the air (or other gas stream) passing over its electrodes as it is being charged up, and then releases the gas as it is being discharged.
- In operation, the device would simply alternate between charging and discharging, with fresh air or feed gas being blown through the system during the charging cycle, and then the pure, concentrated carbon dioxide being blown out during the discharging.

Superfluid Helium defies gravity and climbs on walls.

EVER WONDERED WHY?

There are videos on internet of a man, frying snacks in an oil with his bare hands. Science behind it is *leidenfrost effect*. hands are first dipped in cold water and then in frying oil. The instant at which hand is dipped into oil, water gets evaporated. oil does not come in direct contact with skin and one can easily fry snacks with bare hands.

Leidenfrost effect

The Leidenfrost effect is a physical phenomenon in which a liquid, close to a surface that is significantly hotter than the liquid's boiling point, produces an insulating vapor layer that keeps the liquid from boiling rapidly.

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

DARE TO ANSWER

Instructions :

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

1. A very high frequency wave originating in the nucleus of atom and travelling with the speed of light is the

- A. alpha rays B. X-rays
C. beta rays D. gamma rays

2. A device used to accelerate charged particles, protons, deuterons, and alpha particles and the nuclei of several of the elements of low mass is a

- A. nuclear reactor B. cyclotron
C. betatron D. geiger counter

3. A minute amount of a radio isotope is called a/an

- A. tracer B. dram
C. ounce D. pint

4. 'IC Chips' for computers are usually made of

- A. silicon B. leaf
C. gold D. chromium

5. A vacuum tube that contains a filament, a grid and a plate is called a

- A. diode B. X-ray tube
C. cathode ray tube D. triode

6. Which substance can be used as an anesthetic?

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

7. 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

8. Chemically dry ice is

- | | |
|--|--|
| A. solid sulphur dioxide | B. solid carbon dioxide |
| C. a mixture of ice and common salt | D. ice formed from pure distilled water |

9. Of the following different forms of iron carbon is present in minimum amounts in

- | | |
|---------------------|------------------------|
| A. steel | B. pig iron |
| C. cast iron | D. wrought iron |

10. Which substance is produced by Fermentation?

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

11. 'Gobar gas' contains mainly

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

12. Rusting of iron is an example of

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

13. Chemically, Vitamin 'C' is

- | | |
|-------------------------|-------------------------|
| A. ascorbic acid | B. acetic acid |
| C. citric acid | D. tartaric acid |

14. Excessive consumption of ethanol causes damage to the

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

15. The most abundant source of iron is

- | | |
|----------------------------|----------------|
| A. beans | B. eggs |
| C. green vegetables | D. milk |

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

“Great minds discuss ideas; average minds discuss events; small minds discuss people.”
-Eleanor Roosevelt