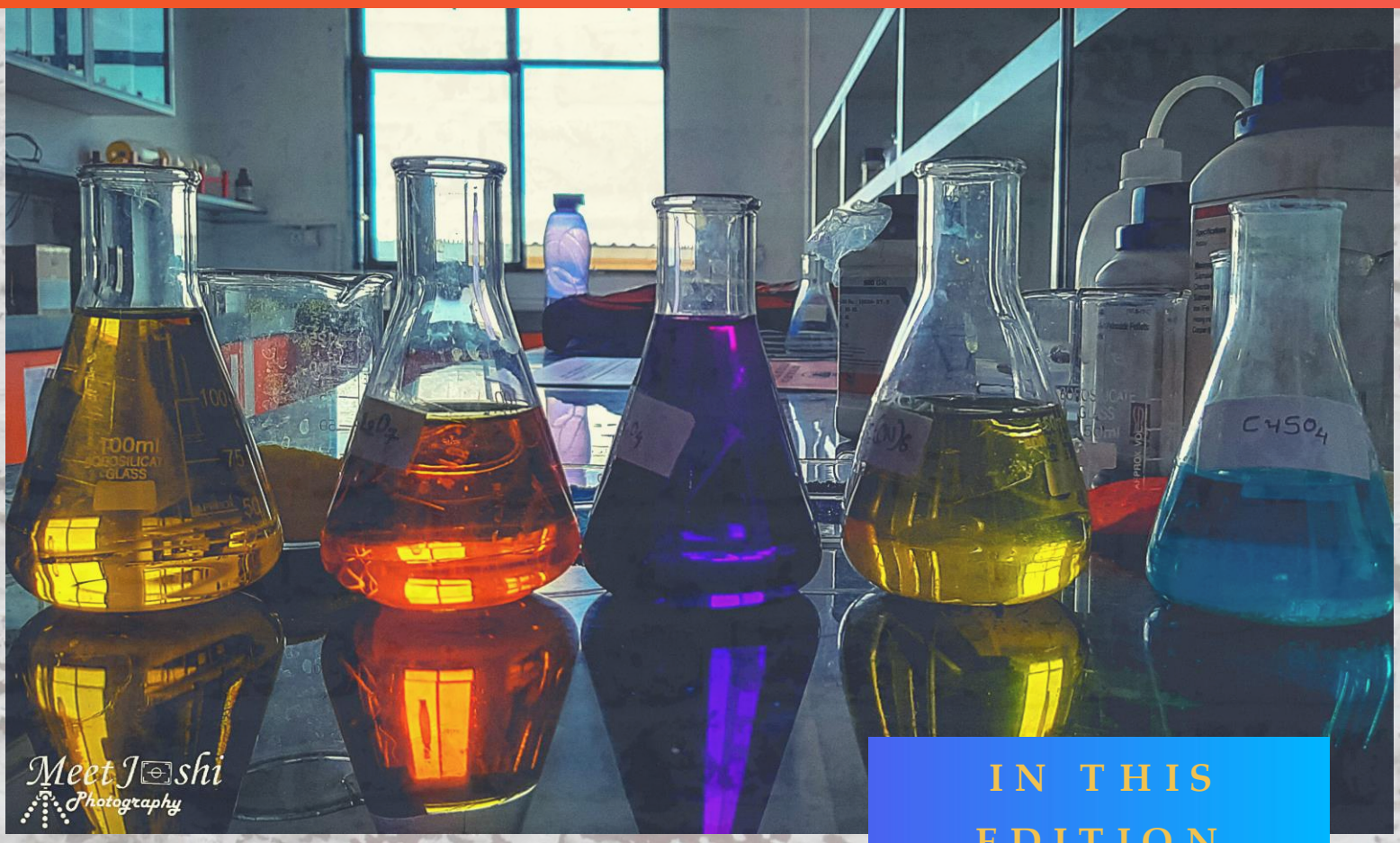
NEUTRALIZE

EDITION NOV'20 - FEB'21



Chemical Engineering

Chemical engineering is a multi-disciplinary branch of engineering that combines natural and experimental sciences (such as chemistry and physics), along with life sciences (such as biology, microbiology and biochemistry) plus mathematics and economics to design, develop, produce, transform, transport, operate and manage the industrial processes that turn raw materials into valuable products

IN THIS EDITION

HOD's Message

I am very pleased that Chemical Engineering department is releasing 13th issue of 'NEUTRALIZE' with the constant support of management, higher authorities, faculty members and exemplary contribution of students. Having decreed as the new HOD of the Department is both a challenge and an opportunity for me. A challenge to harness my leadership skills to address the areas of improvement in the department and an opportunity to work along with highly-esteemed staff and very much willing-to-learn students. Newsletter is believed to be a focus of the inside activities of the department i.e. academics, achievements of students and faculty members as well as innovation occurring in the department. We are reaching towards the term-end very rapidly as you are done with your mid semester exams as well. It is the time for us to work as a team for the improvement of academic grades of all the students.

In the current semester, we have already organized various curricular, co-curricular and extracurricular activities through online and offline mode. The glimpses of these activities have been included in the current edition. We have also purchased few new equipments towards the expansion of our research laboratory. We were also planning for an industrial visit in the last week of March for the 4th and 6th semester degree and 4th semester diploma students. However, due to the sudden increase in number of cases of COVID-19, we will be arranging a virtual industrial visit in the upcoming days for the safety of the students. Furthermore, the practical sessions, project review and Continuous Evaluation Tests will also be conducted through online mode as per the guidelines of concerned authorities.

At the end, I take this opportunity to congratulate our student committee for their great efforts for successfully publishing the current edition. Moreover, I would like to thank Mr. Nishit Shah for coordinating with the students committee and working as a faculty editor. Also, I invite the readers of 'NEUTRALIZE' for their contribution and valuable suggestions for the forthcoming issues.

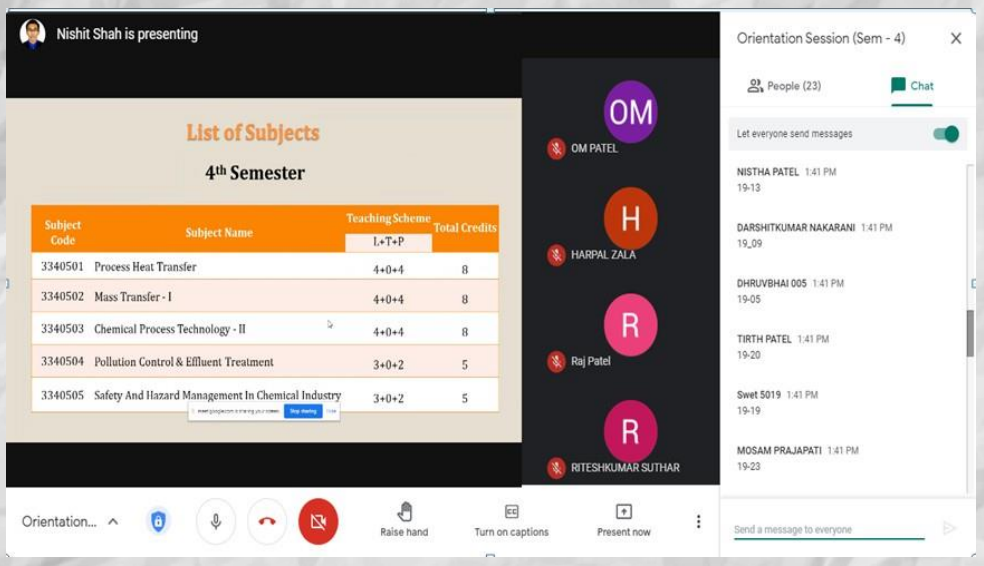
Rajendra Mohite,
Head of Department

Orientation of 4th Semester Diploma Students

Date: 29th December, 2020

SESSION BRIEF

The orientation for the 4th semester diploma students of Aditya Silver Oak Institute of Technology was conducted on 29th December, 2020 on Google Meet platform. 22 students attended the session. The orientation session was for the new academic semester. The session was conducted by Mr. Nishit Shah, Assistant Professor of Chemical Engineering Department. The session started with a discussion of Vision, Mission, POs (Program Outcomes) and PEOs (Program Education Objectives) of the department. He further discussed the planning of the upcoming semester in this pandemic situation. After that, he discussed the upcoming semester in terms of online lectures, virtual labs, online examination and research activities in this situation. He encouraged the students to come forward with the innovative ideas for research activities to learn the courses creatively as the department is looking forward to providing the quality education and promoting the research activities.



"In three words I can sum up everything I've learned about life: it goes on." - Robert Frost

Orientation of 4th Semester Students

Date: 29th December 2020

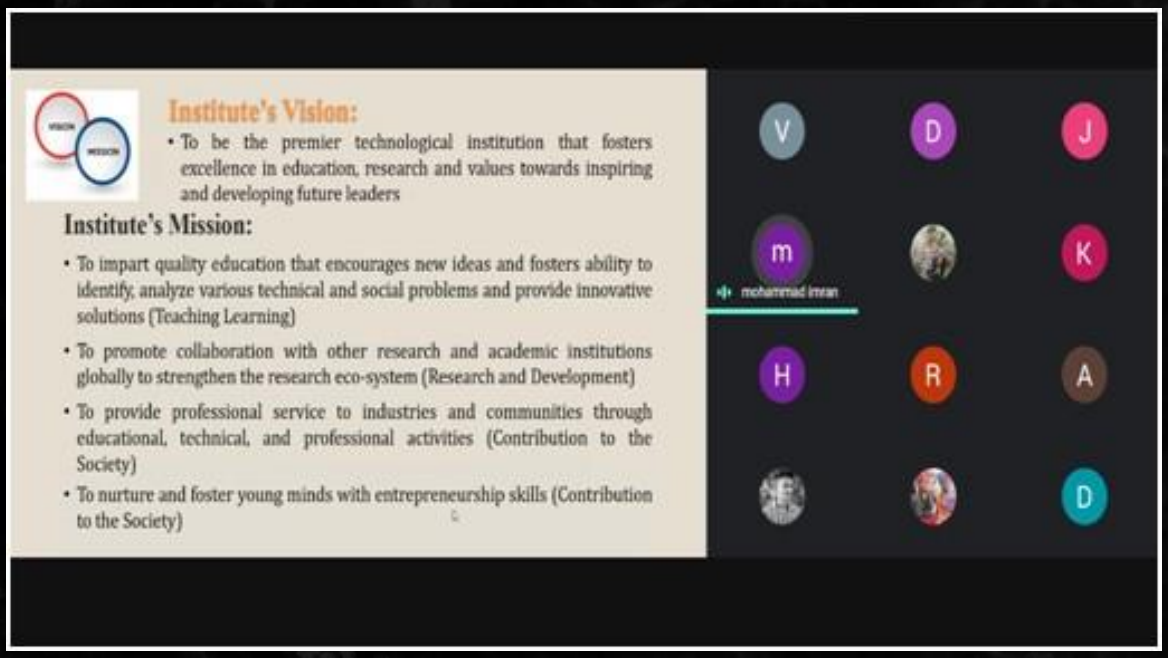
SESSION BRIEF

To welcome 4th semester students to their new academic semester, a virtual orientation program was organized by Chemical Engineering Department on 29 December, 2020 at 10 am through Google Meet platform. Mr. Mohammad Imran, Assistant Professor of Chemical Engineering Department, conducted the webinar by briefing the Vision and Mission of the institute as well as department and Program Education Objectives (PEOs), Program Outcomes (POs) of Chemical Engineering program. He introduced the students with the concept of Outcome Based Education (OBE) and explained the term Course Outcome (CO) in that context. He discussed the planning of the upcoming semester in terms of online lectures, virtual labs, online examinations and research activities in this pandemic situation. He motivated the students to take part in co-curricular and extracurricular activities which would be conducted on regular intervals over various online platforms. Through his knowledge and experience, he encouraged the students to come forward with the innovative ideas for research activities to learn the courses creatively as the department is looking forward to providing not only the quality education but also promoting the research activities. He inspired the students to analyze the course in such a way that it can be directly related to the practical applications useful for the welfare of the society. After attending this session, the students were able to start their academic term with an appreciable enthusiasm and motivation. Also, the students will try to apply theoretical knowledge for the sake of solving real-life problems.

"The future belongs to those who believe in the beauty of their dreams." - Eleanor Roosevelt

Orientation of 4th Semester Students

Day & Date: Tuesday, 29th December 2020



"Don't judge each day by the harvest you reap but by the seeds that you plant." - Robert Louis Stevenson

Orientation of 6th Semester Students

Date: 10th December, 2020

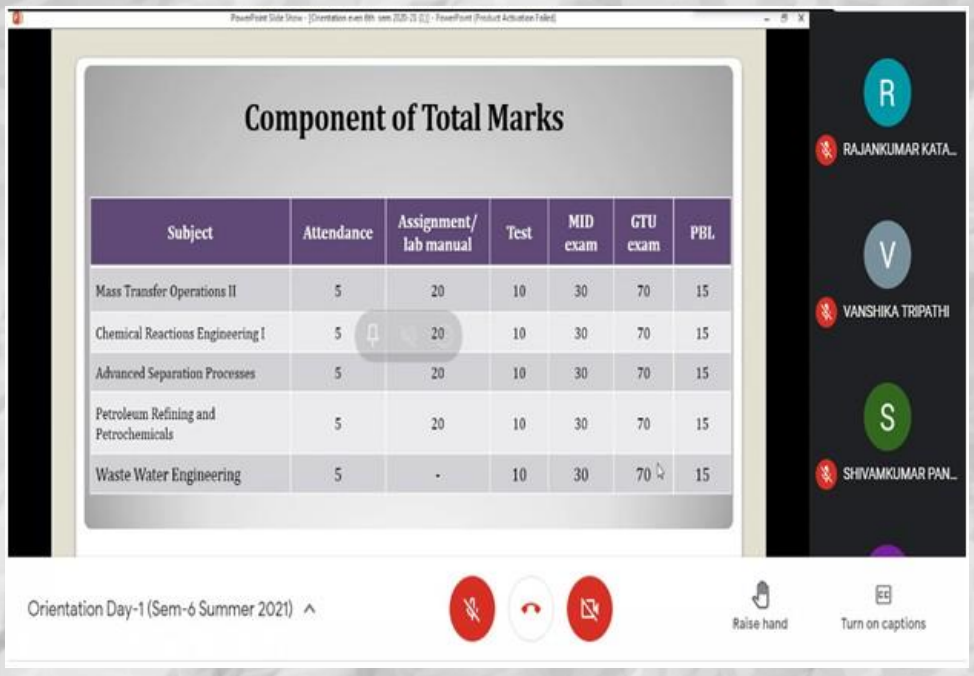
SESSION BRIEF

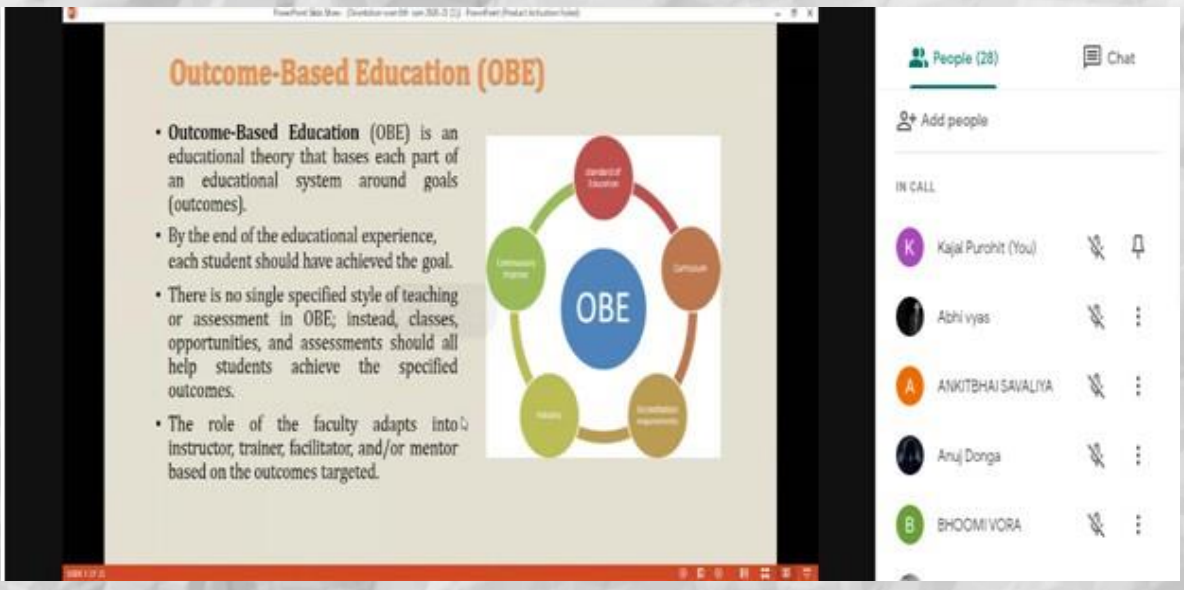
Chemical Engineering Department of Aditya Silver Oak Institute of Technology conducted an orientation session for the students of 6th semester students on 10th, December 2020 at 10 am through Google Meet Platform. The session was conducted by Ms. Kajal Purohit, Assistant Professor of Chemical Engineering Department. She started the session with a discussion on Vision & Mission of the institute and department, Program Education Objectives (PEOs), Program Outcomes (POs) and of Chemical Engineering program. She also introduced the students with the concept of Outcome Based Education (OBE) and explained the term Course Outcome (CO) in that context. She discussed the planning of the upcoming semester in terms of online lectures, virtual labs, online examinations and research activities in this pandemic situation. She motivated the students to take part in co-curricular and extracurricular activities which would be conducted on regular intervals over various online platforms. She encouraged the students to come forward with the innovative ideas for research activities to learn the courses creatively as the department is looking forward to providing not only the quality education but also promoting the research activities. She inspired the students to analyze the course in such a way that it can be directly related to the practical applications useful for the welfare of the society. The session was overall beneficial as the students got the appreciable enthusiasm and motivation to start their academic term.

"Tell me and I forget. Teach me and I remember. Involve me and I learn." - Benjamin Franklin

Orientation of 6th Semester Students

Date: 10th, December 2020





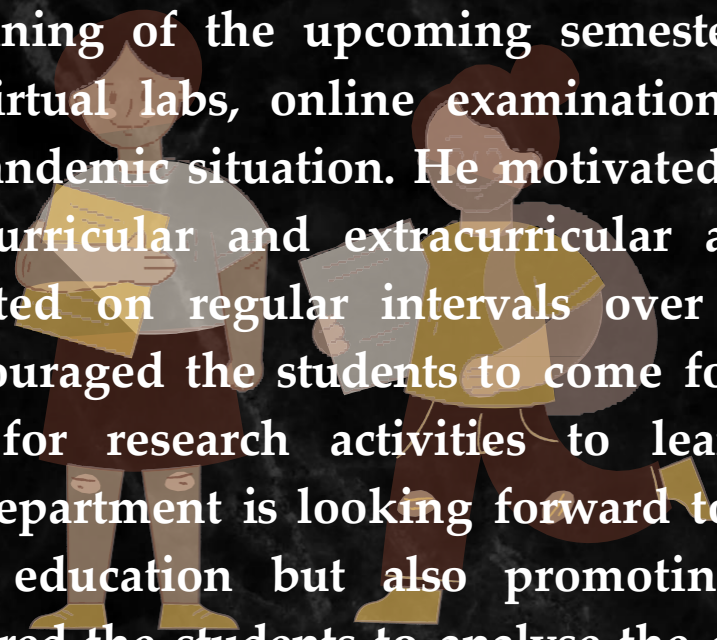
"It is strange that only extraordinary men make the discoveries, which later appear so easy and simple." - Georg C. Lichtenberg

Orientation of 8th Semester Students

Date: 10th December, 2020

SESSION BRIEF

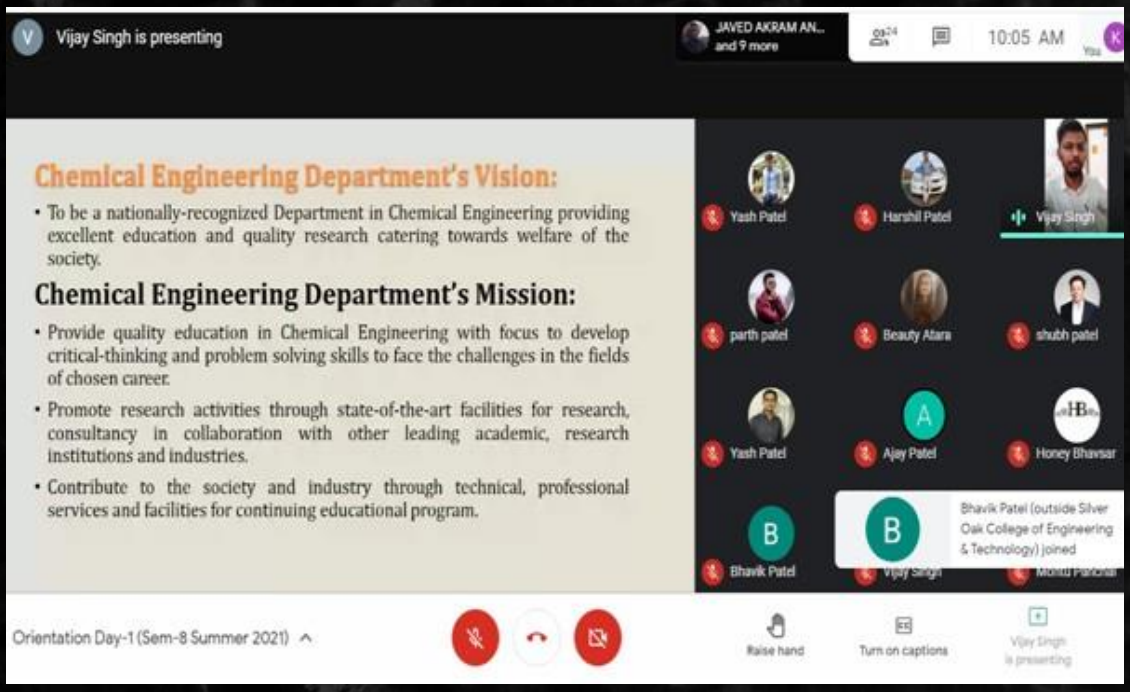
The session was conducted by Mr. Vijay Singh, HOD of Chemical Engineering Department. He started the session with a discussion on Vision and Mission of the institute and department, Program Education Objectives (PEOs), Program Outcomes (POs) of Chemical Engineering program. He also introduced the students with the concept of Outcome Based Education (OBE) and explained the term Course Outcome (CO) in that context. He discussed the planning of the upcoming semester in terms of online lectures, virtual labs, online examinations and research activities in this pandemic situation. He motivated the students to take part in co-curricular and extracurricular activities which would be conducted on regular intervals over various online platforms. He encouraged the students to come forward with the innovative ideas for research activities to learn the courses creatively as the department is looking forward to providing not only the quality education but also promoting the research activities. He inspired the students to analyse the course in such a way that it can be directly related to the practical applications useful for the welfare of the society.



"The best and most beautiful things in the world cannot be seen or even touched - they must be felt with the heart." - Helen Keller

Orientation of 8th Semester Students

Date: 10th December, 2020



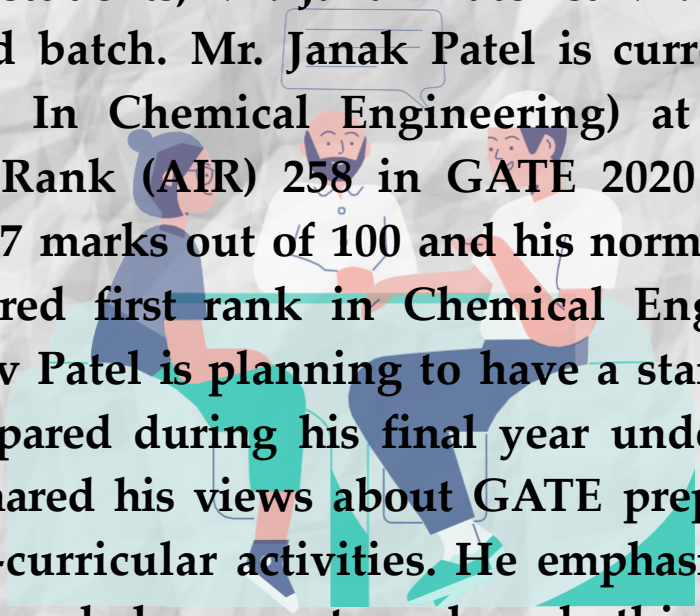
"It is during our darkest moments that we must focus to see the light." - Aristotle

Alumni Interaction Session

Date: 11th December, 2020

SESSION BRIEF

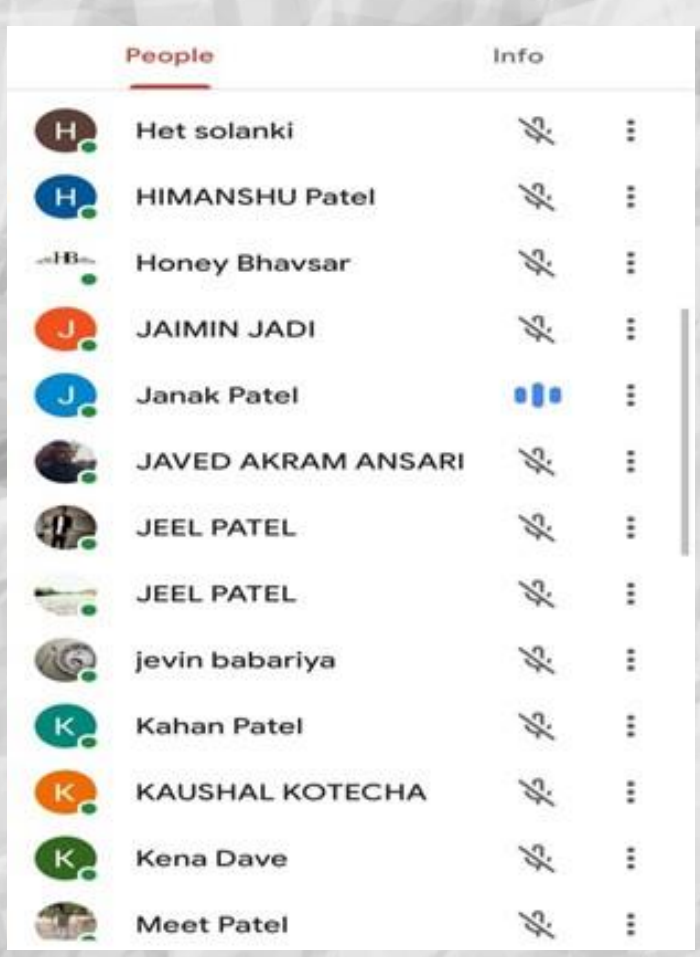
Chemical Engineering Department of Aditya Silver Oak Institute of Technology organized "Alumni Interaction Session" for 6th & 8th semester final & pre-final Year degree students of the department on 11th December, 2020. It was conducted via Google Meet platform at 10 am. The session was conducted under the guidance of Mr. Vijay Singh, HOD of Chemical Engineering Department. Mr. Mohammad Imran, Assistant Professor of Chemical Engineering Department, welcomed alumni students, Mr. Janak Patel & Mr. Dhruv Patel, both from 2016 enrolled batch. Mr. Janak Patel is currently pursuing his masters (M. Tech. In Chemical Engineering) at IIT Mumbai. He secured All India Rank (AIR) 258 in GATE 2020 organized by IIT Delhi. He got 63.67 marks out of 100 and his normalized GATE score was 685. He secured first rank in Chemical Engineering all over Gujarat. Mr. Dhruv Patel is planning to have a start-up for a product which he had prepared during his final year undergraduate project. Mr. Janak Patel shared his views about GATE preparations & taking part in extra & co-curricular activities. He emphasized on the proper use of technical knowledge, smart work and ethics. Mr. Dhruv Patel shared his views about professionalism in the field as he is working in industry. He shared his field experience among students. He also discussed about how to face interviews. The students also interacted with the alumni and got their doubts cleared at the end of the session. It was very informative and helpful for the students.



"Whoever is happy will make others happy too."
- Anne Frank

Alumni Interaction Session

Date: 11th December, 2020



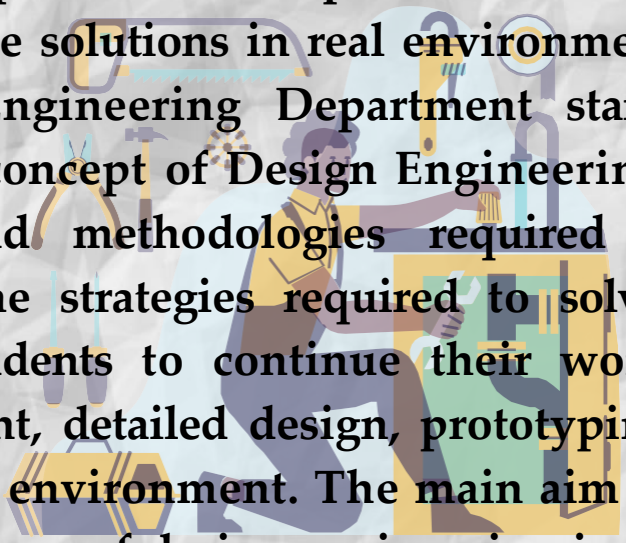
"Do not go where the path may lead, go instead where there is no path and leave a trail." - Ralph Waldo Emerson

Session on "Design Engineering - IIB"

Date: 11th December, 2020

SESSION BRIEF

Design Engineering is an advanced level course designed for those who have undergone the fundamentals of design thinking process and understood the importance of the process completely. A session was organized on "Design Engineering - IIB" for 6th semester students on 11th December, 2020 via Google Meet platform. In this semester, the students will continue their work from 5th semester on community based project and complete the design thinking cycle with emphasis on product development, detail design, prototyping and validation of the solutions in real environment. Mr. Vijay Singh, HOD, Chemical Engineering Department started the session by briefing about the concept of Design Engineering-IIB. He explained the techniques and methodologies required for gathering the information and the strategies required to solve the problem. He emphasized the students to continue their work from concept to product development, detailed design, prototyping and validation of the solutions in real environment. The main aim of the session was to explain the significance of design engineering in the field of technical education so that the students would be able to undertake the final year project in more efficient manner.



Session on "PMMS Portal Activities"

Date: 30th December 2020

SESSION BRIEF

A session on “PMMS Portal Activities” for the 8th semester students of Chemical Engineering Department, Aditya Silver Oak Institute of Technology, was conducted on 30th December, 2020 through Google Meet platform. It was addressed by Mr. Mohammad Imran, Assistant Professor, Chemical Engineering Department. PMMS is a user friendly and result oriented platform which helps students for multiple activities being carried out during the final year project work. It covers activities such as student registration, team formation, Periodic Progress Report (PPR), Design Engineering Canvas, Business Model Canvas (BMC), Patent Drafting Exercise (PDE), Project Report, Plagiarism Search Report and Completion Certificate. Mr. Mohammad Imran started the session by briefing about the concept of Project-II. He started with “Periodic Progress Report (PPR)” task, in which each student has to give updates individually with respect to his contribution in progress of the project at a regular time interval. Further he briefed about “Patent Draft Exercise (PDE)” activity which is designed to train students about provisional patent filing procedure in India, its requirements, necessary forms, fees and associated time limit etc. At the end, he briefed about the Plagiarism Search Report/Certificate. The session ended with the discussion of the queries raised by the students.

GATE Mock Tests

Graduate Aptitude Test in Engineering (GATE) is basically a national level examination on the comprehensive understanding of the candidates in various undergraduate subjects in Engineering / Technology / Architecture. GATE Mock Tests were held by the Chemical Engineering Department of Aditya Silver Oak Institute of Technology for pre-final year and final year students. The tests were conducted on the Canvas platform to check the outcome of the preparation done by the students which leads them towards improvement. The individual tests were conducted for various subjects such as Heat Transfer, Instrumentation and Process Control and Mass Transfer Operations on various dates and a full-length test was also arranged on 5th February, 2021. From the results, the students came to know about the areas where they are lacking, where they need to concentrate and need to practice more which would be very helpful for them in excelling in GATE. The GATE Club of the department is planning to arrange more such rounds of mock tests of core subjects which will be very fruitful to the students and lead towards improvisation of their results and knowledge.

Master your mind and re-create your reality.

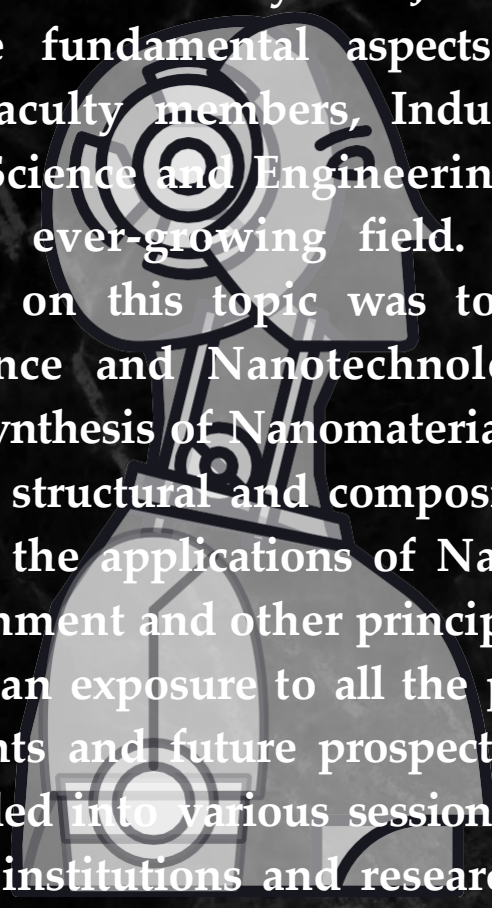
Webinar on "Recent Trends in Nanoscience and Nanotechnology"

Date: 1st &2nd December, 2020

SESSION BRIEF

The Chemical Engineering Department of Aditya Silver Oak Institute of Technology gave their students the exposure to a webinar on "Recent Trends in Nanoscience and Nanotechnology". The fundamental objective of this 2 Days GUJCOST sponsored webinar was to introduce the fundamental aspects of Nanoscience and Nanotechnology to Faculty members, Industry persons, Research scholars and UG, PG Science and Engineering students so that they can contribute to the ever-growing field. The main purpose of organizing a webinar on this topic was to introduce the basic concepts of Nanoscience and Nanotechnology including various methods used for the synthesis of Nanomaterials. Furthermore, it was aimed to elaborate the structural and compositional characterization techniques along with the applications of Nanotechnology in the field of Energy, Environment and other principal applications.

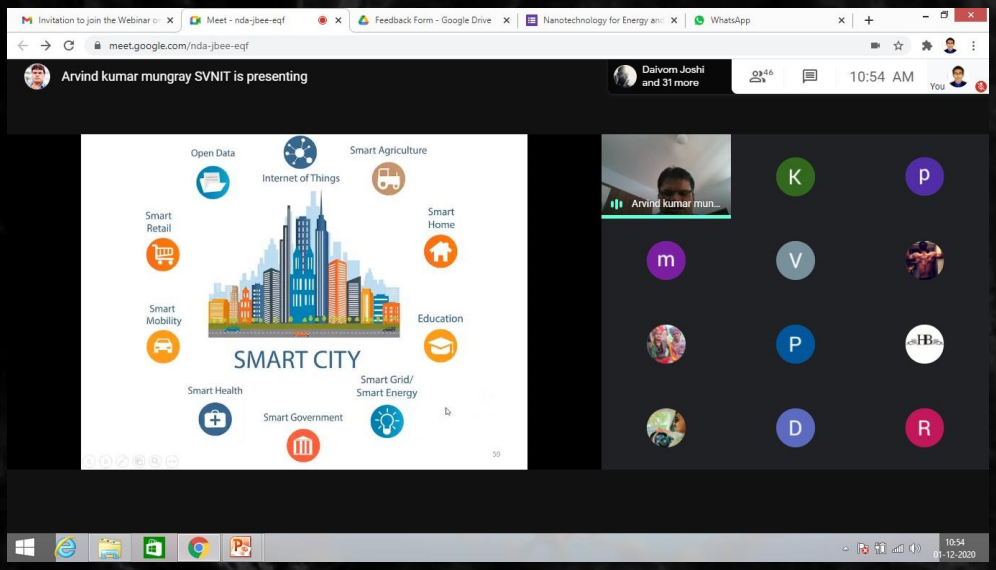
The webinar provided an exposure to all the participants in terms of the recent advancements and future prospects in the relevant field. The webinar was divided into various sessions delivered by eminent speakers from reputed institutions and research organizations across the country. The webinar was attended by a total of 54 participants consisting of students and faculty members from several institutes.

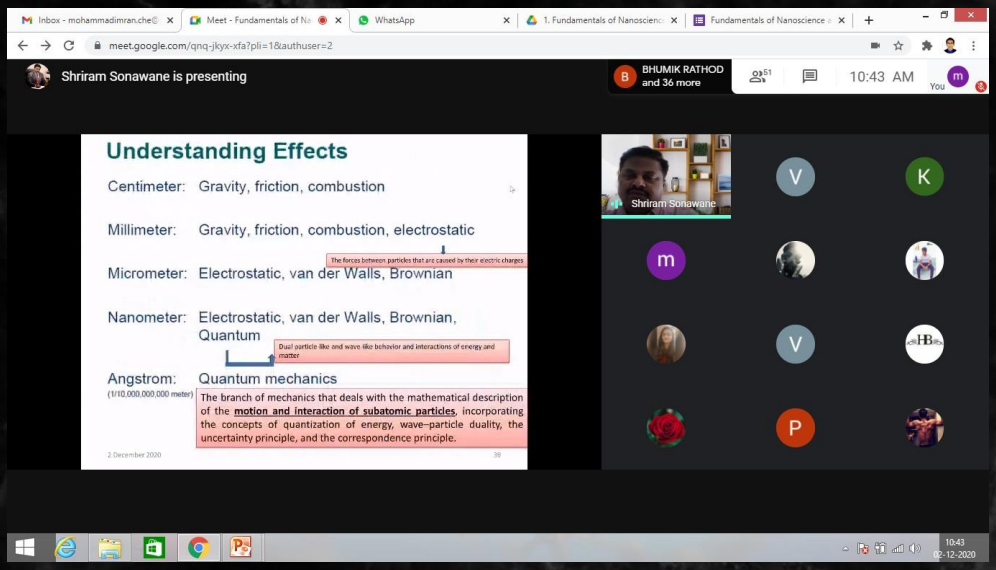


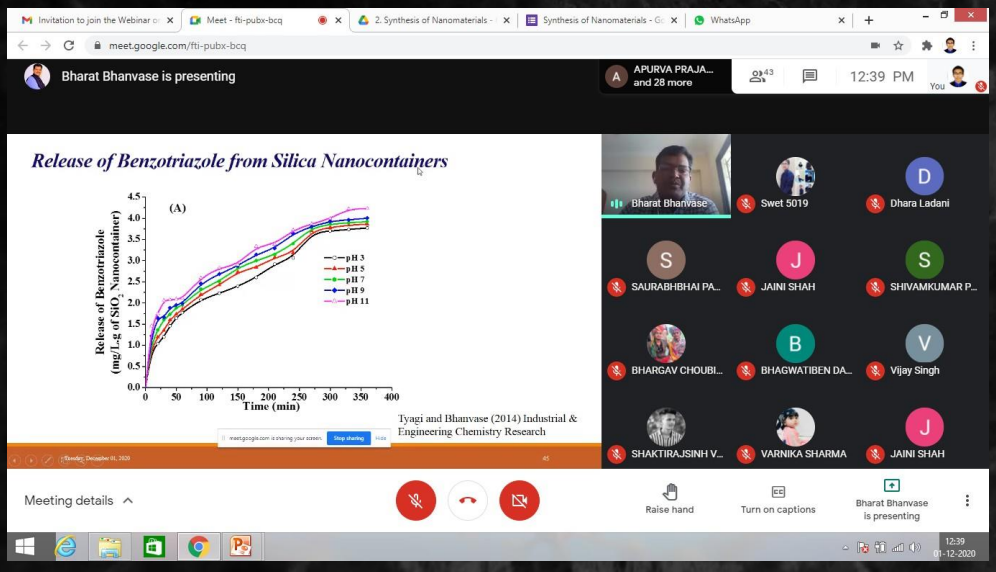
Sometimes things have to fall apart to make way for better things.

Webinar on "Recent Trends in Nanoscience and Nanotechnology"

Date: 1st & 2nd December 2020







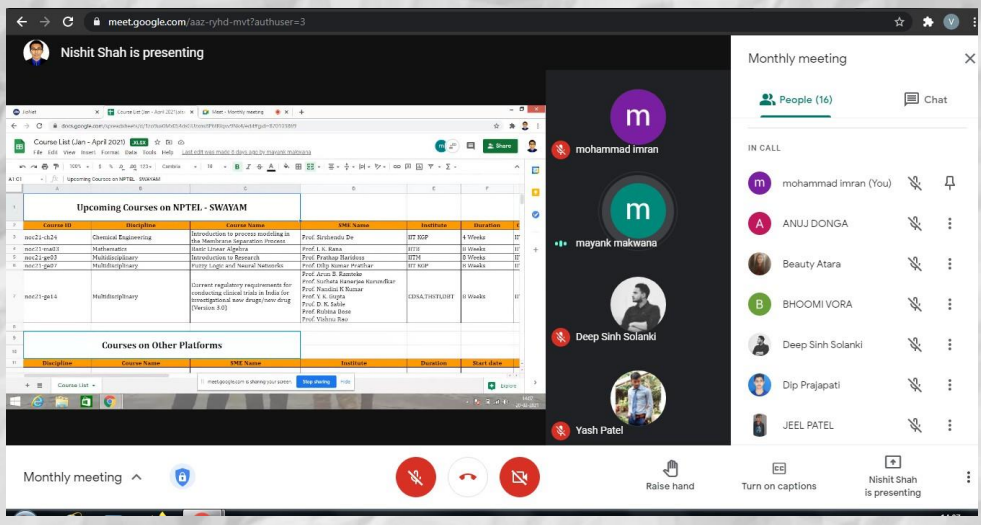
"The saddest aspect of life right now is that gathers knowledge faster than society gathers wisdom." - Isaac Asimov

Session on “Importance of Physical Fitness and Sports in Students"

Date: 20th February, 2021

SESSION BRIEF

An online session on "Importance of Physical Fitness and Sports" was organized by Chemical Engineering Department, Aditya Silver Oak Institute of Technology for 6th semester students. Mr. Mohammad Imran, Head of the Department, proposed the establishment of departmental sports club and asked the students to give their suggestions for the same. He discussed with the students how physical activities can leave an impact on cognitive skills and attitudes which are important components of academic performance. These include enhanced concentration and attention as well as improved classroom behavior. The physical activities reduce the amount of cholesterol and triglycerides in the body. This happens because of the increased flexibility of the walls of the blood vessels. This flexibility increases due to the physical exertion. At the end of the session, the students showed their interest to became a part of the club and promised to include the physical activities in their routine life.



There is no limit to what you can achieve; your potential is limitless.

Session on "Introduction to ASPEN"

Date: 27th February, 2021

SESSION BRIEF

A session on "Introduction to ASPEN" was organized by Chemical Engineering Department, Aditya Silver Oak Institute of Technology on 27th February, 2021 at 10 am for the students of 6th & 8th semester. ASPEN Plus is an advanced chemical optimization software used by the bulk, fine, specialty, and biochemical industries, as well as the polymer industry for the design, operation, and optimization of safe, profitable manufacturing facilities. Mr. Mayank Makwana explained the students about various optimization processing capacity and operating conditions, identify energy savings opportunities and reduce Green House Gas emissions, reduce costs and improve product quality. The objective of the present one-day introductory session on ASPEN Plus was to make students familiar with the basics of ASPEN Plus. He provided a hands on experience to the students and solved a numerical problem for more enhanced and comprehensive learning. The students expressed their enthusiasm by asking various doubts and difficulties.

If you want to fly, give up everything that weighs you down. – Buddha

Appraisal of TEDx Volunteers from Chemical Engineering Department

The Chemical Engineering Department of Silver Oak University appreciates the efforts of their students for contributing towards successful completion of TEDx organized by Silver Oak University.

"Youngsters are the Future of the Country."

The Chemical Engineering Department of Silver Oak University is proud of the students of the department that they have voted in the election showing their responsibilities towards building the nation.

If the plan doesn't work change the plan but never the goal. Success is not final, failure is not fatal: it is the courage to continue that counts.

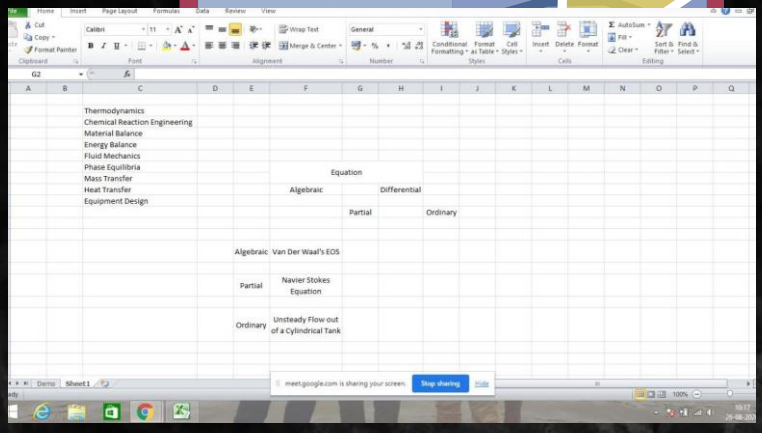
- Winston Churchill

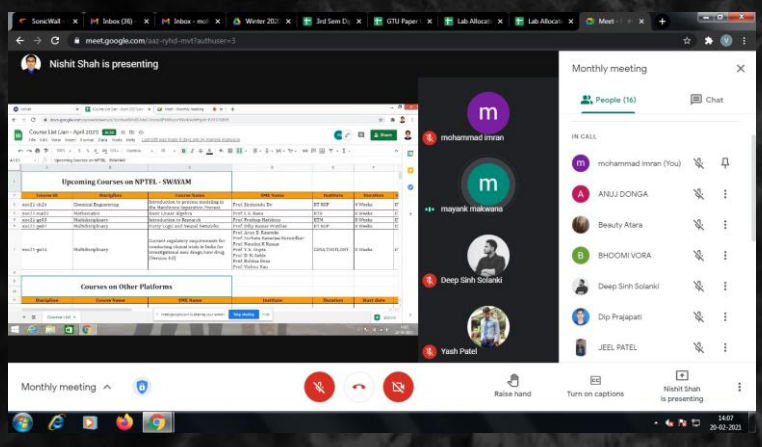
Session on "MOOC Courses"

Date: 20th February 2021

SESSION BRIEF

A session on “MOOC courses” was organized by the Chemical Engineering Department, Aditya Silver Oak Institute of Technology on 20th February 2021 for the students of 6th Semester through Google Meet platform. Mr. Mayank Makwana, Assistant Professor of the department addressed the session. He explained the significance of MOOC courses in terms of their growing trends in various developed countries. Therefore, platforms like NPTEL, SWAYAM and Coursera are offering more than 155 engineering courses and 108 science courses. Moreover, many companies claim that the recent COVID-19 outbreak and lockdown in many countries surged the demand for science MOOCs. He further shared the spreadsheet of all available MOOC courses and explained the significance and implementation of every course. The session concluded with a vote of thanks.





What you get by achieving your goals is not as important as what you become by achieving your goals. - Zig Ziglar

Overall Personality Development

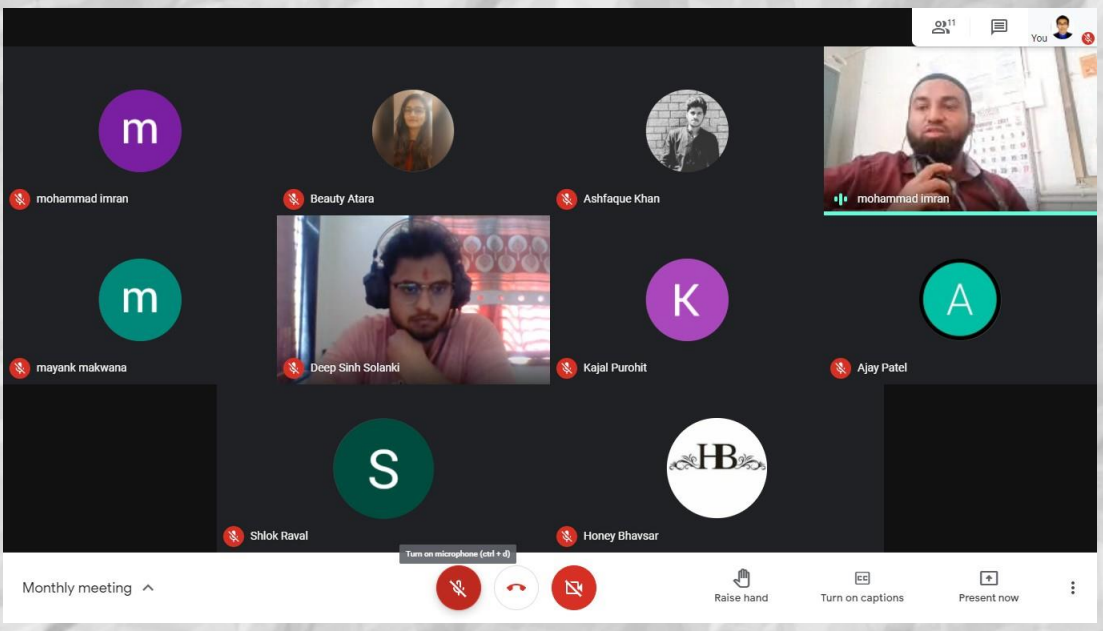
Date: 20th February, 2021

SESSION BRIEF

Chemical Engineering Department of Aditya Silver Oak Institute of Technology Organized interactive session on "Overall Personality Development" for professional career for 8th semester student of Chemical Engineering Department on 20th February 2021. The session was an interaction between HOD, faculty members and the students regarding personality development. The professional skills in personality development help students in advancing their career. A professional development plan is an actionable step for achieving career goals. Mr. Mohammad Imran, Head of the Department, emphasized that the personal development skills are important because they allow creating strategic and tactical plans for personal and professional growth towards achieving goals. He gave them example of the skills people commonly practice to facilitate personal growth such as communication, self-confidence, work ethics, leadership and problem solving. He advised them to improve personal development skills by overcoming fear and learning new things. The session concludes with a vote of thanks.

Overall Personality Development

Date: 20th February, 2021



"A man who dares to waste one hour of time has not discovered the value of life." - Charles Darwin

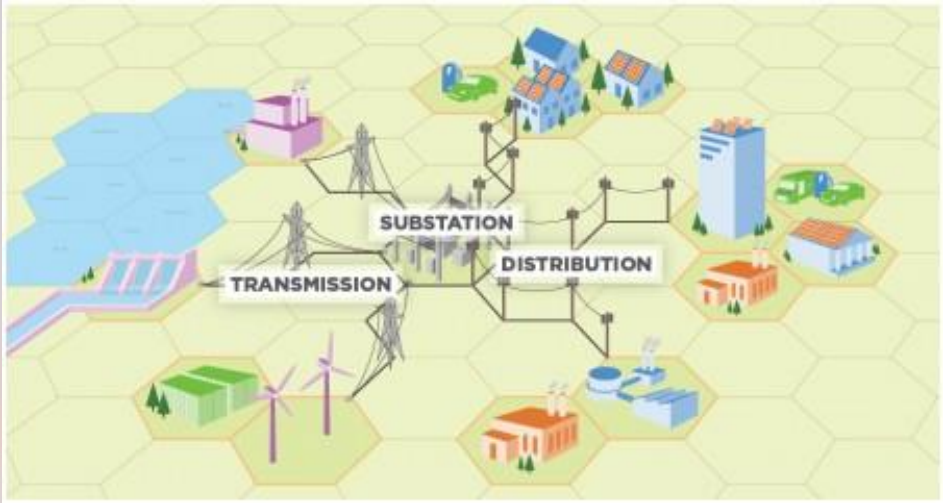
Tech Report

Distributed Energy Generation

Distributed generation refers to a variety of technologies that generates electricity at or near where it will be used, such as solar panels and combined heat and power. Distributed generation may serve a single structure, such as a home or business, or it may be part of a micro-grid (a smaller grid that is also tied into the larger electricity delivery system), such as at a major industrial facility, a military base, or a large college campus. When connected to the electric utility's lower voltage distribution lines, distributed generation can help support delivery of clean, reliable power to additional customers and reduce electricity losses along transmission and distribution lines. Distributed generation can benefit the environment if its use reduces the amount of electricity that must be generated at centralized power plants, in turn can reduce the environmental impacts of centralized generation. Specifically:

1. Existing cost-effective distributed generation technologies can be used to generate electricity at homes and businesses using renewable energy resources such as solar and wind.
2. Distributed generation can harness energy that might otherwise be wasted—for example, through a combined heat and power system.
3. By using local energy sources, distributed generation reduces or eliminates the "line loss" (wasted energy) that happens during transmission and distribution in the electricity delivery system.

"The aim of education is the knowledge, not of facts, but of values."
- William S. Burroughs



Different Technologies for Distributed Generation:

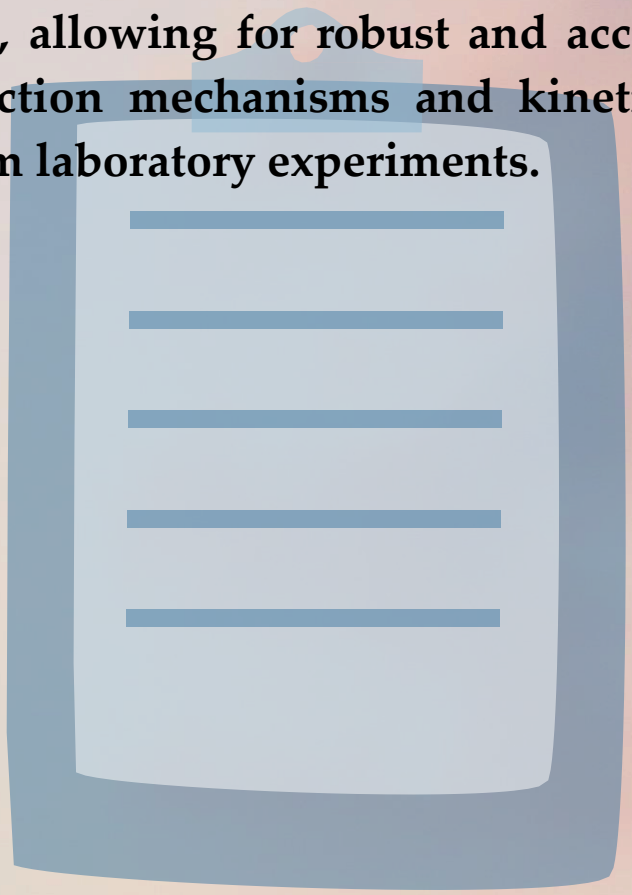
- Solar photovoltaic panels
- Small wind turbines
- Natural-gas-fired fuel cells
- Emergency backup generators, usually fueled by gasoline or diesel fuel
- Combined heat and power systems
- Solar photovoltaic panels
- Wind
- Hydropower
- Biomass combustion or co-firing
- Municipal solid waste incineration
- Fuel cells fired by natural gas or biomass
- Reciprocating combustion engines, including backup generators, which are may be fueled by oil

Tech Report

Quantum Chemistry

Quantum chemistry, also called molecular quantum mechanics, is a branch of chemistry focused on the application of quantum mechanics to chemical systems. Quantum chemistry is a very powerful tool to study the properties of molecules and their reactions. The recent year's development in quantum chemistry methods, especially that of density functional theory (DFT) methods, has made it possible for quantum chemistry calculations to reach accuracies comparable to those obtained in experiments for molecules of moderate sizes Understanding electronic structure and molecular dynamics using the Schrödinger equations are central topics in quantum chemistry. Chemists rely heavily on spectroscopy through which information regarding the quantization of energy on a molecular scale can be obtained. Quantum chemistry studies the ground state of individual atoms and molecules, and the excited states, and transition states that occur during chemical reactions. On the calculations, quantum chemical studies use also semi - empirical and other methods based on quantum mechanical principles, and deal with time dependent problems. Major goals of quantum chemistry include increasing the accuracy of the results for small molecular systems, and increasing the size of large molecules that can be processed, which is limited by scaling considerations the computation of time increases as a power of the number of atoms. The rapid development of computer technologies has greatly encouraged chemists to use quantum chemistry to understand, model, and predict molecular properties and their reactions, properties of nanometer materials, and reactions and processes taking place in biological systems. To develop quantum chemistry methods, capable of treating large or complicated systems, has been one of the important subjects in quantum chemistry. In the early days, quantum chemists developed mostly semi-empirical molecular orbital methods for the study of large systems.

These methods often involve many empirical parameters that are optimized by reproducing the properties of some reference molecules. Computational quantum chemistry has helped gain a better understanding of polymerization reactions.Because such studies allow for rapid screening of reaction model mechanisms, they become very powerful tools when they are combined with design of experiments, laboratory experiments, spectroscopic measurements, and macroscopic-level (scale) polymerization reactor modeling. In the near future, computational quantum chemistry methods are expected to mature, allowing for robust and accurate predictions of polymerization reaction mechanisms and kinetic parameters, with little or no help from laboratory experiments.



Tech Report

Nuclear Batteries

An atomic battery, nuclear battery, radioisotope battery or radioisotope generator is a device which uses energy from the decay of a radioactive isotope to generate electricity. Like nuclear reactors, they generate electricity from nuclear energy, but differ in that they do not use a chain reaction. Although commonly called batteries, they are technically not electrochemical and cannot be charged or recharged. In comparison they are very costly, but have an extremely long life and high energy density, and so they are mainly used as power sources for equipment that must operate unattended for long periods of time, such as spacecraft, pacemakers, underwater systems and automated scientific stations in remote parts of the world. Nuclear battery has lots of advantages such as small volume, longevity, environ stability and so on, therefore, it was widely used in aerospace, deep-sea, polar region, heart pacemaker, micro-electromotor and other fields etc. The application of nuclear battery and the development of its materials promote each other.

Words of Wisdom

Pursuing Chemical engineering is one of the dreams which I'm currently living with. My perception of engineering is just not getting technically educated but it is also a journey of self-discovery which helps us inculcate skills which we can cherish throughout our lives. Along with my academics, I got a chance to discover things which sort of helped me upgrade my skills. With the help of my faculties, I started taking part in extra-curricular activities which lead me to be a part of the organizing team of TedxSilverOakuniversity. It was a wonderful and incentive experience.

Vanshika Tripathi (6th sem)

I realized that to upskill ourselves; an overall evolution is needed. At the end, my words of wisdom are "Don't let someone's perception define you. Just believe your instinct."

Words of Wisdom

Since my childhood, I was willing to become an engineer but when I scored 45 % in my 12th boards my relatives and natives all frightened me that I couldn't do engineering with such low grades. At first, it demotivated me but then I decided to prove them wrong and I started pursuing my career in chemical engineering. With the help of respected faculties and talented seniors, I learned the basics of chemical engineering. Whenever I got stucked at any technical issues, they always guided me to how to solve it. In this field, I not only gained the knowledge of engineering as well as the respect which I had lost in front of my relatives after securing 3rd rank in the first year of engineering. At the end, my words of wisdom are 'Do what you want to do, Nothing is easy and Nothing is impossible'.

Surjit Mandal (4th sem)

Neutralize Quiz Questions

1. We store silver chloride in a dark coloured bottle

a. As it is a white solid.
b. As it undergoes redox reaction
c. To avoid action of sunlight
d. None of above

2. Fatty foods become rancid due to the process of

a. Oxidation
b. Corrosion
c. Reduction
d. Hydrogenation

3. Silver article turns black when kept in the open for a few days due to formation of

a. H_2S
b. Ag_2O
c. $AgSO_4$
d. Ag_2S

4. Which of the following gases can be used for storage of fresh sample of oil for a long time?

a. CO_2 or O_2
b. N_2 or He
c. He or O_2
d. N_2 or O_2

5. The father of modern chemistry is _____

a. Priestley
b. Lavoisier
c. Dalton
d. Mendeleev

6. An element X forms an oxide XO_3. What is the valence of X?

a. 1
b. 2
c. 3
d. 6

7. Which of the following has highest frequency?

a. Cosmic rays
b. X - rays
c. Radio waves
d. Micro waves

"Education breeds confidence. Confidence breeds hope. Hope breeds peace." - Confucius

8. In isotopes the number of neutrons is _____

a. same
b. different
c. both
d. none

9. Which of the following compound is not present in toothpaste?

a. Sodium Fluoride
b. Calcium Phosphate
c. Calcium Carbonate
d. Aluminium Hydroxide

10. Which compound is mainly used in handsanitizer?

a. Isopropyl Alcohol
b. β - Alanine
c. Betadine
d. Xanthene

11. A Liquid was mixed with C_2H_5OH and a drop of conc. H_2SO_4 was added. A compound with a fruity smell was formed then the liquid was _____

a. CH_3OH
b. HCHO
C. CH_3COOCH_3
d. CH_3COOH

12. The oxidation state of Cr in $[Cr(NH_3)_4Cl_2]^+$

a. 0
b. +6
c. +4
d. +3

13. Among Al_2O_3, SiO_2, P_2O_3, and SO_2 the correct order of acid strength is

a. $SO_2 < P_2O_3 < SiO_2 < Al_2O_3$
b. $SiO_2 < P_2O_3 < SO_2 < Al_2O_3$
c. $SO_2 < Al_2O_3 < SiO_2 < P_2O_3$
d. $Al_2O_3 < SiO_2 < P_2O_3 < SO_2$

14. The following type of bonding is strongly directional in solids.

a. Vander Waal's
b. Covalent
c.Metallic
d. Ionic

15.The temperature at which ferromagnetic material can no longer be magnetised by the outside forces is termed as _____

a. Eutectic temperature
b. Curie temperature
c. Inversion temperature
d. Critical point

16. All the following alloying elements of steel increase hardness but sacrifice ductility, except

a. Vanadium
b. Chromium
c. Molybdenum
d. Nickel

17. Enzymes belong to category of

a. Fats
b. Carbohydrates
c. Proteins
d. Vitamin

18. They are produced by micro-organisms that are toxic to other micro-organisms. They are called

a. Antacids
b. Antiseptic
c. Antibiotics
d. Antihistamine

19. Plastics have changed life style and conveniences in home from refrigerators to mixers. They are made up of _____

a. Polymers
b. Monomers
c. Carbon
d. Silicon

20. Why it keeps us awake,why you think we feel sleepy sometime even when we are not tired,the is a hormone

a. Adrenaline
b. Adenosine
c. Thyroxine
d. Serotonim

"Education is what remains after one has forgotten what one has learned in school." - Albert Einstein

Team Neutralize

HOD

Dr. Rajendra Mohite

Faculty Editor

Mr. Nishit Shah

Faculty Members

Mr. Pritam khandale

Ms. Kajal Purohit

Mr. Mayank Makwana

Editing Team

Jimesh Shah (6th sem)
Anuj Donga (6th sem)
Hiren Chavada (6th sem)
Jeel Patel (6th sem)
Rajan Katariya (6th sem)

Writing Team

Moksha Shah (6th sem)
Kena Dave (6th sem)
Bhagwati Dayal (6th sem)
Avani Raval (4th sem Diploma)

Research Team

Vanshika Tripathi (6th sem)
Bhargav Choubisa (4th sem)

Contact us:
neutralizenewsletter@gmail.com
Neutralize E-Newsletter
Chemical Engineering Department
Silver Oak University