



Shri Vile Parle Kelavani Mandal's
**Institute of Technology,
Dhule**

Online Workshop

On

**“Exploring Applied Science in
Engineering Horizon”**

Conducted by

**Applied Science & Humanities
Department**

(Using MS Team application)

12th - 15th July 2021

Title of Workshop: -

“Exploring Applied Science in Engineering Horizon”

Aim of Workshop: -

The main aim of this webinar was to begin positive thought process and increase the academic interest in our students' mind about basic science and humanities, which will help them in selecting their successful carrier options.

Objectives of Workshop: -

This workshop was planned for First Year students, in order to get them overall idea about the importance of applied science subject's in engineering education. Students will understand the basics of various techniques, which they learn during their engineering studies. Students will also understand the importance of basic science knowledge for their future carrier selection through competitive examinations, job interviews etc.

Workshop Organised by: -

SVKM's Institute of Technology's Department of Applied Science and Humanities organised this online workshop for First Year B. tech students entitled “Exploring Applied Science in Engineering Horizon” from 12th – 15th July 2021, every day at 3:00 pm to 4:30 pm, using MS Team application.

Workshop Registration Link:-

https://docs.google.com/forms/d/1K8SpJ386JkugnKHY_6Lpq0eosol3wy4gkmrDyxthnlc/edit

Online Workshop Flyer

Workshop on “Exploring Applied Sciences in Engineering Horizon”

Organized by

Department of Applied Science & Humanities

Shri Vile Parle Kelavani Mandal's

Institute of Technology Dhule.



Date: 12-15 July, 2021
Time: 3:00 pm IST on MS Team
INAUGURAL SESSION (3:00 pm to 3:15 pm)

Welcome Address	Dr. Tushar Shinde
Introductory Speech	Dr. Nilesh P. Salunke
Vote of Thanks	Dr. Manoj R. Sonawane

Date: 12 July 2021 (Monday) Day-1 Session Moderator: Dr. Tushar Shinde

Time	Title	Name of Speaker
3:00 pm to 4:00 pm	Polymer-Future and Prospective of Engineering Students	Dr. Vikas Gite HOD, Polymer Chemistry, KBC, NMU, Jalgaon.

Date: 13 July 2021 (Tuesday) Day-2 Session Moderator: Prof. Sachin Nerkar

Time	Title	Name of Speaker
3:00 pm to 4:00 pm	Foundation of Science for Engineering	Dr. Anil Garje Asst. Prof. S.P. College Pune

Date: 14 July 2021 (Wednesday) Day-3 Session Moderator: Prof. Chandu Koli

Time	Title	Name of Speaker
3:00 pm to 4:00 pm	Application of differential equation in Engineering	Dr. NarendraKumar Dasre Assoc. Prof. RAIT College Nerul

Date: 15 July 2021 (Thursday) Day-4 Session Moderator: Prof. Rajiv Junne

Time	Title	Name of Speaker
3:00 pm to 4:00 pm	Professional Communication Skills for Engineers	Prof. Udaykumar Nikam Faculty, A.P. Shah Inst. of Tech. Thane, Mumbai

Dr. Tushar Shinde
(HOD Department of Applied Science)
(Convenor)

Dr. Nilesh P. Salunke
(Principal SVKM, IOT, Dhule)
(Patron)

Organizing Committee: Dr. Manoj Sonawane, Dr. Shakeelur Raheman, Prof. Sachin Nerkar, Prof. Prashant Gawade, Prof. Chandu Koli, Prof. Lahu Aware, Prof. Rajiv Junne

DAY ONE

Monday, 12th July 2021

BASED ON

Subject: Engineering Chemistry

SESSION COORDINATORS

Dr. Tushar Shinde

Dr. Manoj Sonawane

RESOURCE PERSON

***Dr. Vikas Gite, Head of the Polymer Chemistry Department at Kavayitri
Bahinabai Chaudhari North Maharashtra University (KBCNMU),
Jalgaon.***

SESSION LINK:

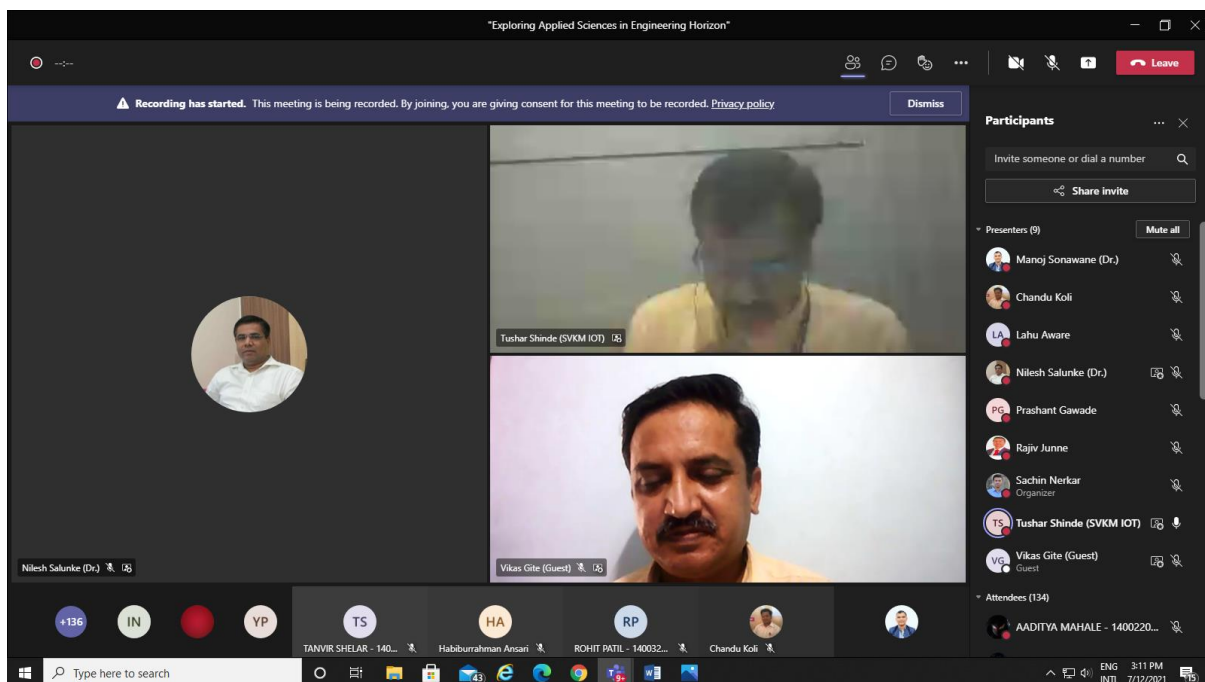
https://teams.microsoft.com/l/meetup-join/19%3ameeting_MWRkMmQ4YWUtMTImMy00YzliLTljOTItNzE0NjdhNjcwYzQ1%40thread.v2/0?context=%7b%22Tid%22%3a%22d1f14348-f1b5-4a09-ac99-7ebf213cbc81%22%2c%22Oid%22%3a%22ce7acb1a-c431-4207-b8f0-c332e959ad83%22%7d

SESSION FEEDBACK LINK:

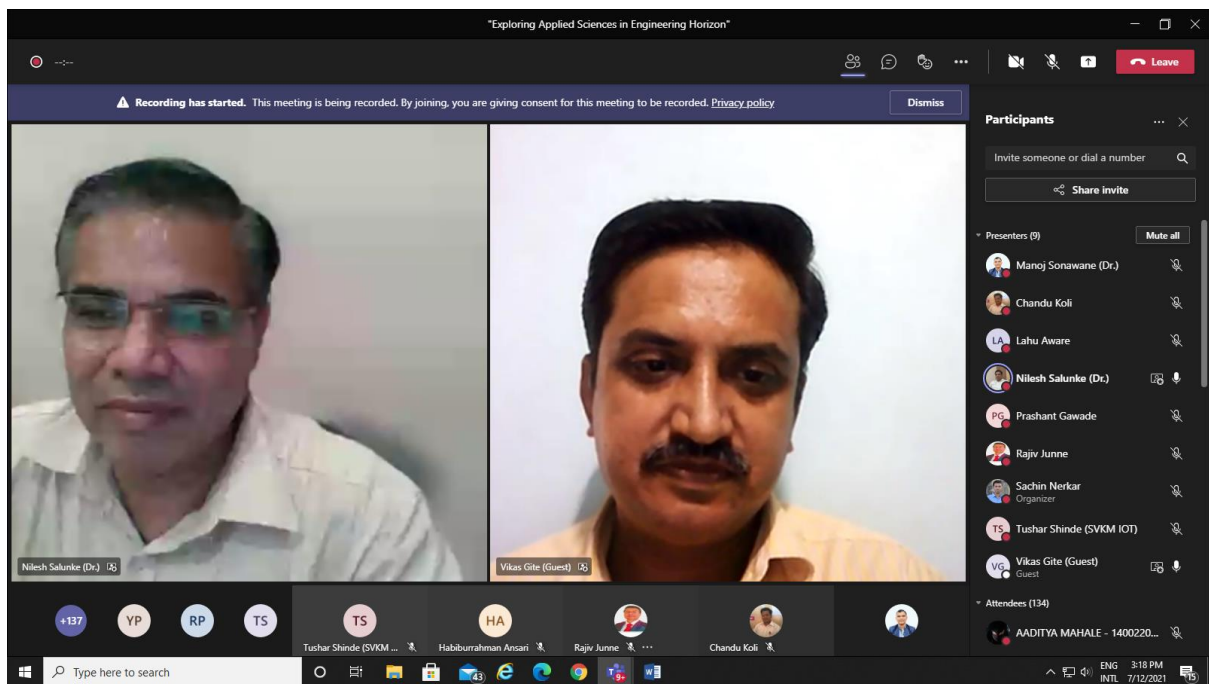
https://forms.office.com/Pages/ResponsePage.aspx?id=SEPx0bXxCUqsmX6_ITy8gdaT32ClnhRApN-dUMrp57xUOTRZWjFCUjBUSkdGU0JNT111UDFJWFBPSi4u

Session Highlights: -

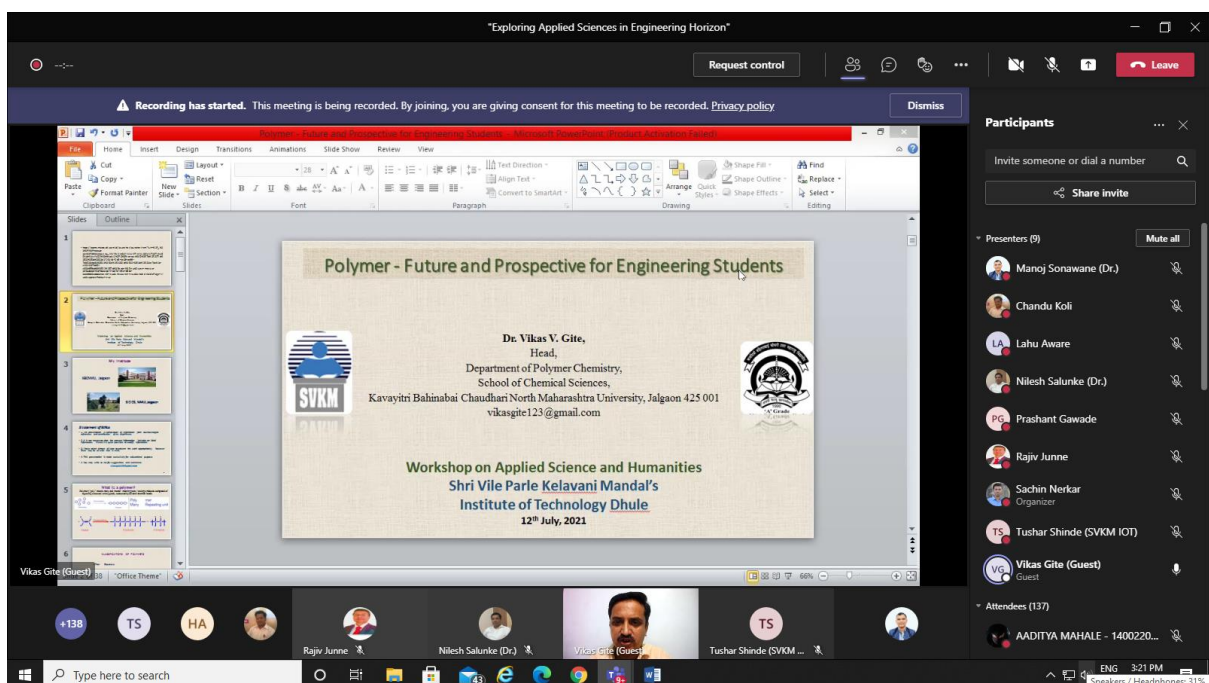
Dr. Tushar Shinde, First Year coordinator, hosted this session and Dr. Sonawane handled technical support. Total session duration was one hour and after that 20 min. time for question-answer / discussion. Dr. Shinde started the session at 3:00 pm with the welcome of guest of honour Dr. Nilesch Salunke, principal SVKM's IOT, session Dr. Vikas Gite, and all the faculties and participants.



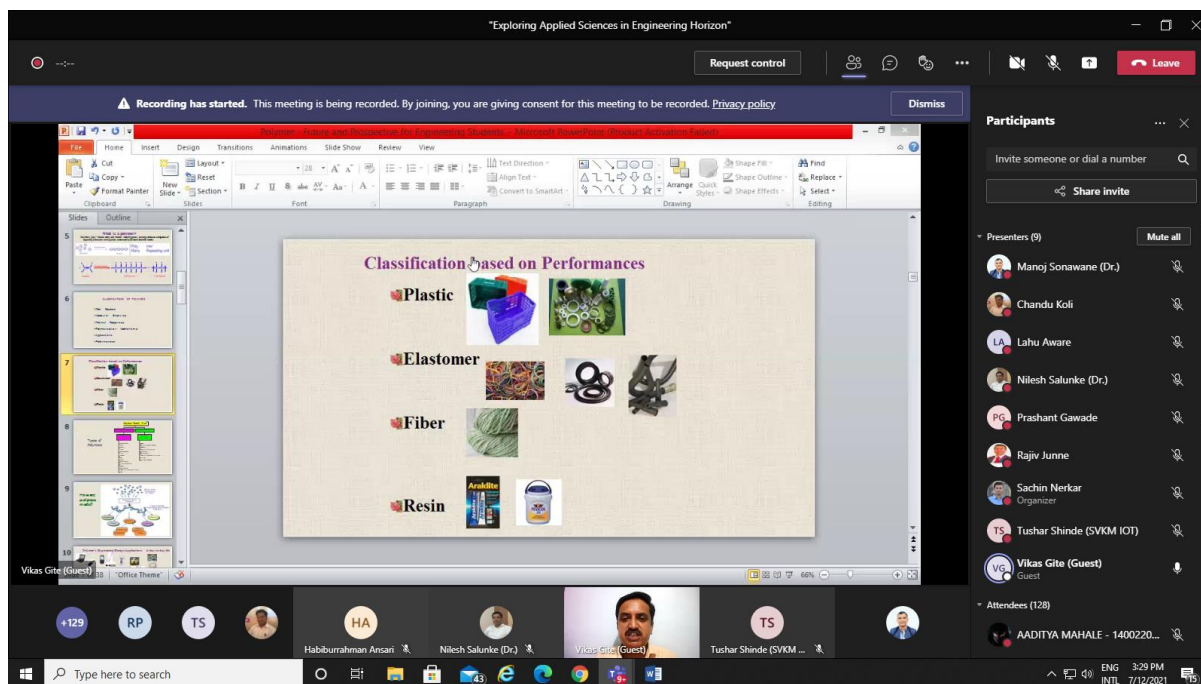
In the beginning, Dr. Shinde invited Dr. Salunke sir to enlighten the session with his valuable words. To accept the invitation Dr. Salunke first welcome the resource person then introduced his views and thoughts about this workshop. Sir talked about the importance of applied science subjects and their relevance in engineering education by explaining that why the first year department have conducting this workshop. He also mentions the todays need to effective communication and knowledge of language and the proper way of communicating that knowledge at the time of interviews or other required platforms.



After principal sirs, introductory speech the guest speaker Dr. Vikas Gite started his lecture on engineering chemistry subject and explained the relevance of polymer chemistry to increase the standard of engineering sectors in all domains. He insists the first year engineering students that they should at least have a superficial chemistry knowledge to choose successful engineering career.



In his talk, Dr. Gite explained various technology based concepts of chemistry, which are widely used in civil, mechanical electrical and computer engineering. He mentioned that every major technology and its function always based on basic science principles.



To talk about engineering polymers, their types, examples and different types of properties Dr. Gite have various interesting daily life examples and various applications of these polymeric materials to increase efficiency and effectivity of desired materials. He also gave light on the various methods of polymer synthesis and different types of fillers or additives used in that synthesis to add or improved the particular characteristics in the desired polymer.

He also mentioned the current industrial requirement and advances in used technologies and how the students should upgrade their knowledge about these techniques by collecting the information from various resources. He also gave light on upcoming job opportunities as well as startup business opportunities in this particular sector.

"Exploring Applied Sciences in Engineering Horizon"

Recording has started. This meeting is being recorded. By joining, you are giving consent for this meeting to be recorded. [Privacy policy](#)

Request control

Participants

Invite someone or dial a number

Share invite

Presenters (0) Mute all

- Manoj Sonawane (Dr.)
- Chandu Koli
- LA Lahu Aware
- Nilesh Salunke (Dr.)
- PG Prashant Gawade
- Rajiv Junne
- Sachin Nerkar Organizer
- TS Tushar Shinde (SVKM IOT)
- VG Vikas Gite (Guest) Guest

Attendees (121)

- AADITYA MAHALE - 1400220...

Howare polymers made?

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Invite someone or dial a number

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- Sachin Nerkar Organizer
- TS Tushar Shinde (SVKM IOT)
- VG Vikas Gite (Guest) Guest

Attendees (121)

- AADITYA MAHALE - 1400220...

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ENG 3:38 PM 7/12/2021

Finally, while concluding his talk Dr. Gite shared some of his research work as well as interesting incidences he gone through. He also gave some useful tips for our students who want to choose their career engineering chemistry domain.

"Exploring Applied Sciences in Engineering Horizon"

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Attendees (116)

- AADITYA MAHALE - 1400220...

Compounding of Polymers

Participants

Invite someone or dial a number

Share invite

Presenters (0) Mute all

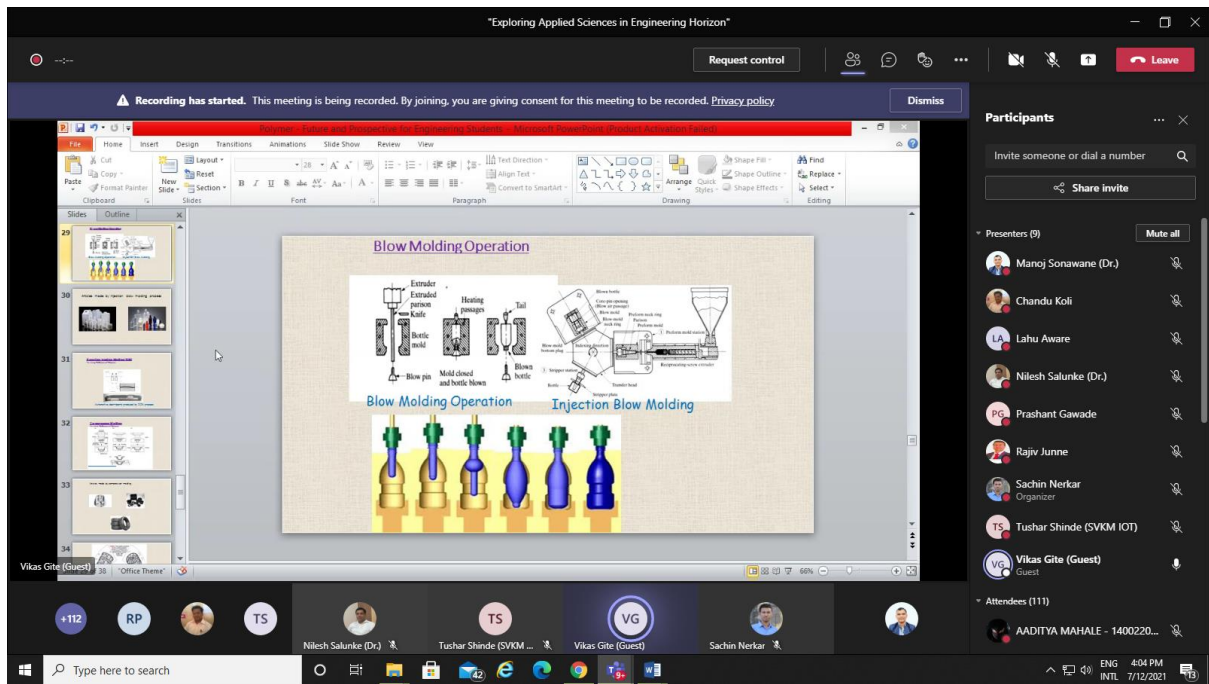
- Manoj Sonawane (Dr.)
- Chandu Koli
- LA Lahu Aware
- Nilesh Salunke (Dr.)
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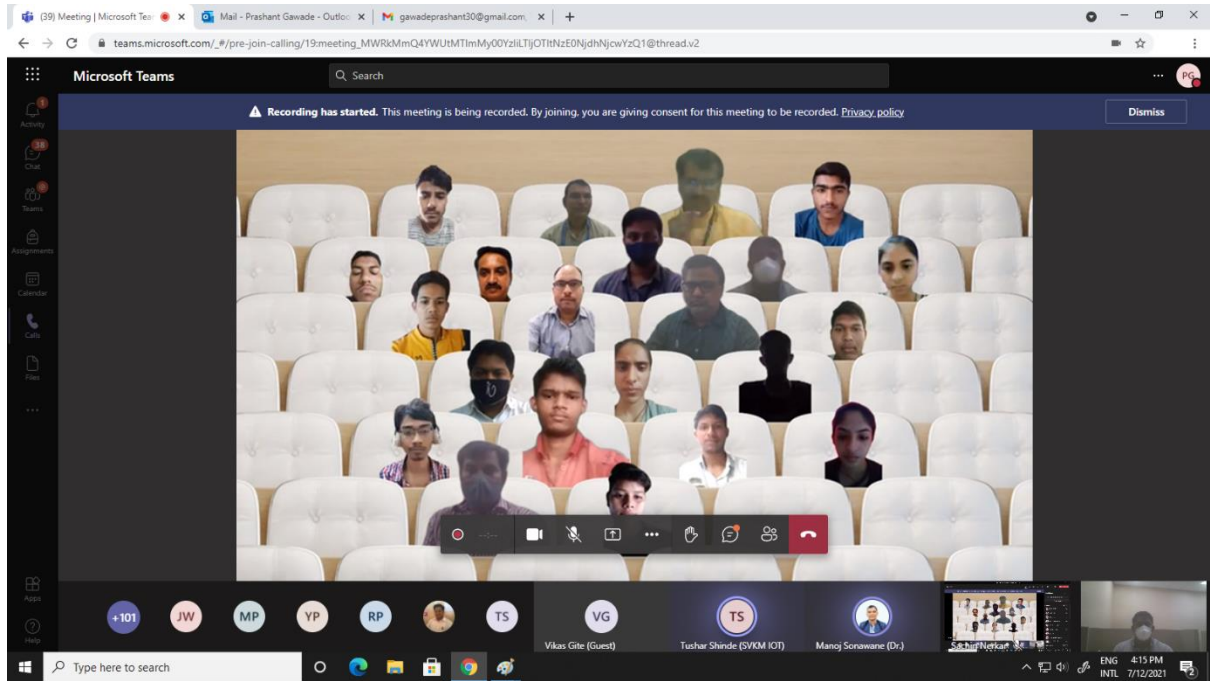
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Towards the end of the session, Dr. Manoj R. Sonawane presented vote of thanks, by expressing his gratitude towards Institute management committee, principal, guest speaker, all teaching faculties, and at the end towards all first year students and participants for the success of day one session.





Day one session of the workshop concluded by online together mode photography on MS Team application.

DAY TWO

Monday, 13th July 2021

BASED ON

Subject: Engineering Physics

Session Title: Foundation of Science for Engineering

SESSION COORDINATORS

Mr. Sachin Nerkar

Dr. Shakeelur Raheman

RESOURCE PERSON

Dr. Anil Garje, Assistant Professor

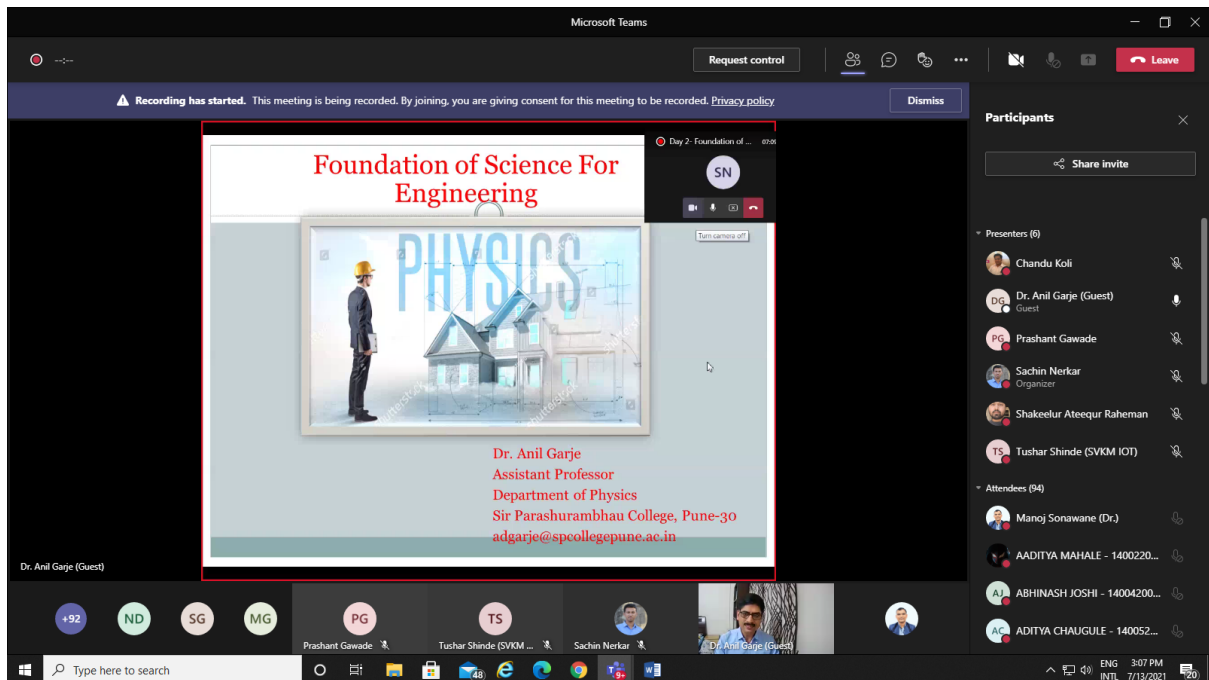
S.P.College , Pune

SESSION LINK:

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SESSION FEEDBACK LINK:

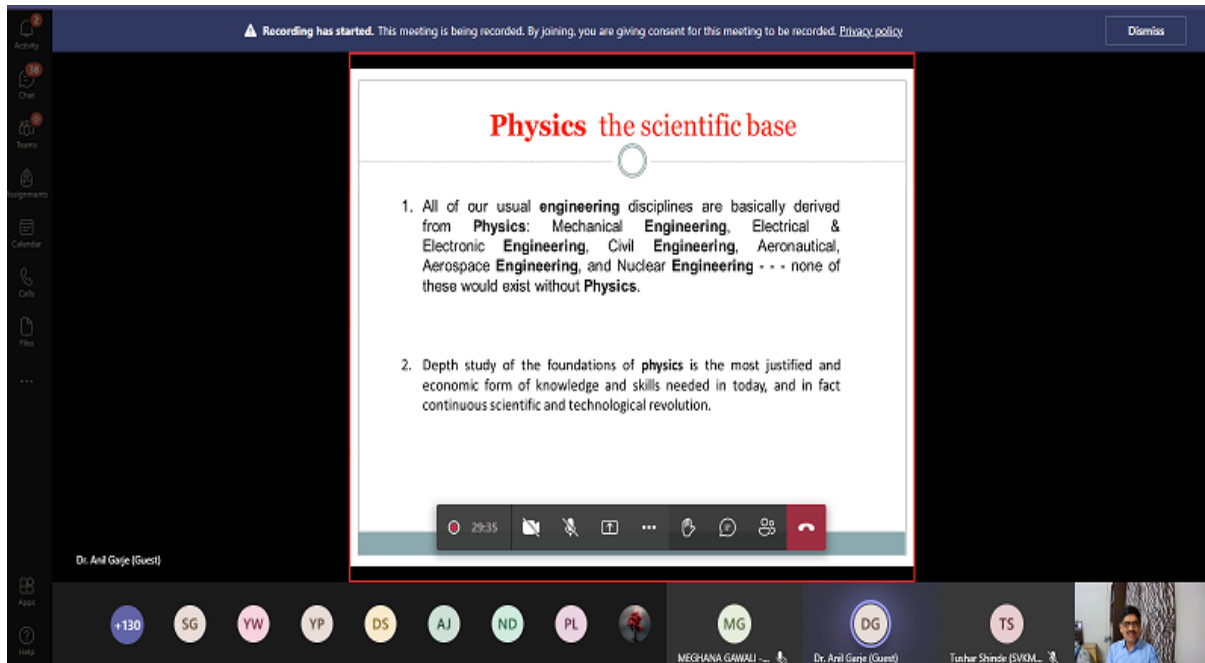
https://forms.office.com/Pages/ResponsePage.aspx?id=SEPx0bXxCUqsmX6_ITy8gdaT32ClnhRApN-dUMrp57xURFJCMTdGOFIxSIEwTUZRNUk3NTkyWFFXVy4u



On second day of workshop , Dr.Anil Garje , Assistant Professor of Physics, S.P. College, Pune delivered talk on foundation of science for Engineering.He highlighted role of physics,chemistry and mathematics in engineering. He noted that Mechanical,Electrical,E&TC,Civil,Aeronautical, Aerospace and Nuclear engineering are derived from physics.



Dr. Garje also told that without basic research we cannot design new technology, so technology comes after basic science research. Now a days interdisciplinary approach should be adopted. Nanofuel can be used as a coolant in car engines.

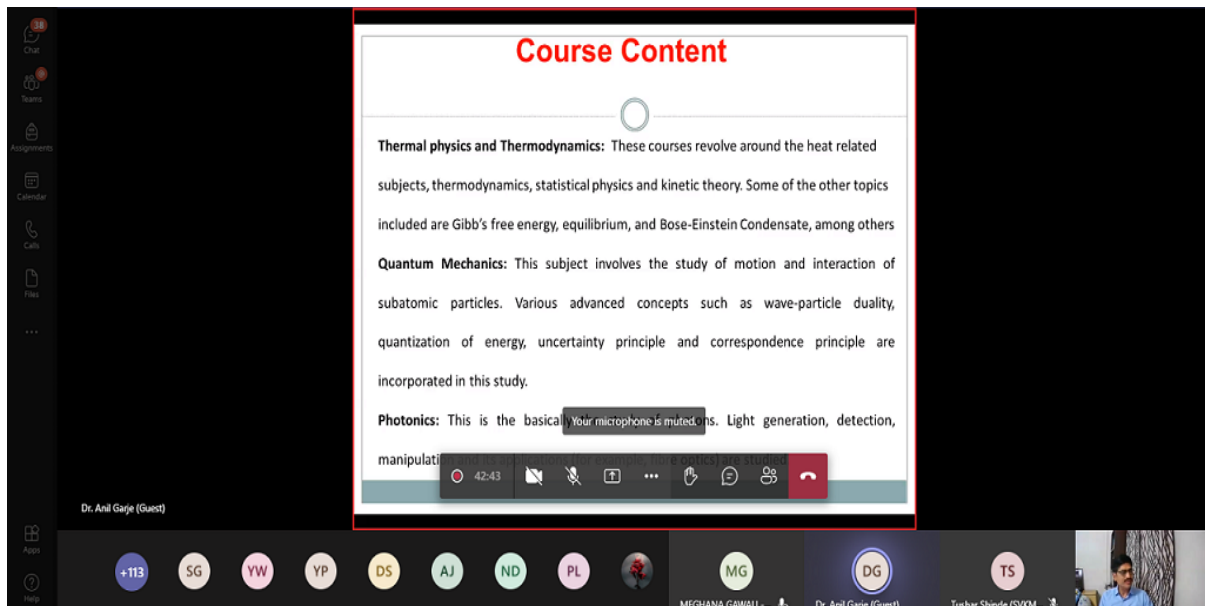


The screenshot shows a Zoom meeting interface. At the top, a notification states "Recording has started. This meeting is being recorded. By joining, you are giving consent for this meeting to be recorded. Privacy policy". The main content is a slide titled "Physics the scientific base" in red text. The slide contains two numbered points:

1. All of our usual **engineering** disciplines are basically derived from **Physics**: **Mechanical Engineering**, **Electrical & Electronic Engineering**, **Civil Engineering**, **Aeronautical**, **Aerospace Engineering**, and **Nuclear Engineering** - - - none of these would exist without **Physics**.
2. Depth study of the foundations of **physics** is the most justified and economic form of knowledge and skills needed in today, and in fact continuous scientific and technological revolution.

The slide also features a timer showing 29:35 and various Zoom controls like mute, video, chat, and share. The bottom of the screen shows a grid of participant avatars, including Dr. Anil Garje (Guest) and Tushar Shinde (SVKM...).

Stating applications of different branches of physics like optics, quantum physics photonics he highlighted importance of these fields in engineering.



The screenshot shows a Zoom meeting interface. At the top, a notification states "Recording has started. This meeting is being recorded. By joining, you are giving consent for this meeting to be recorded. Privacy policy". The main content is a slide titled "Course Content" in red text. The slide contains three paragraphs:

Thermal physics and Thermodynamics: These courses revolve around the heat related subjects, thermodynamics, statistical physics and kinetic theory. Some of the other topics included are Gibb's free energy, equilibrium, and Bose-Einstein Condensate, among others

Quantum Mechanics: This subject involves the study of motion and interaction of subatomic particles. Various advanced concepts such as wave-particle duality, quantization of energy, uncertainty principle and correspondence principle are incorporated in this study.

Photonics: This is the basicall your microphone is muted. Light generation, detection, manipulat

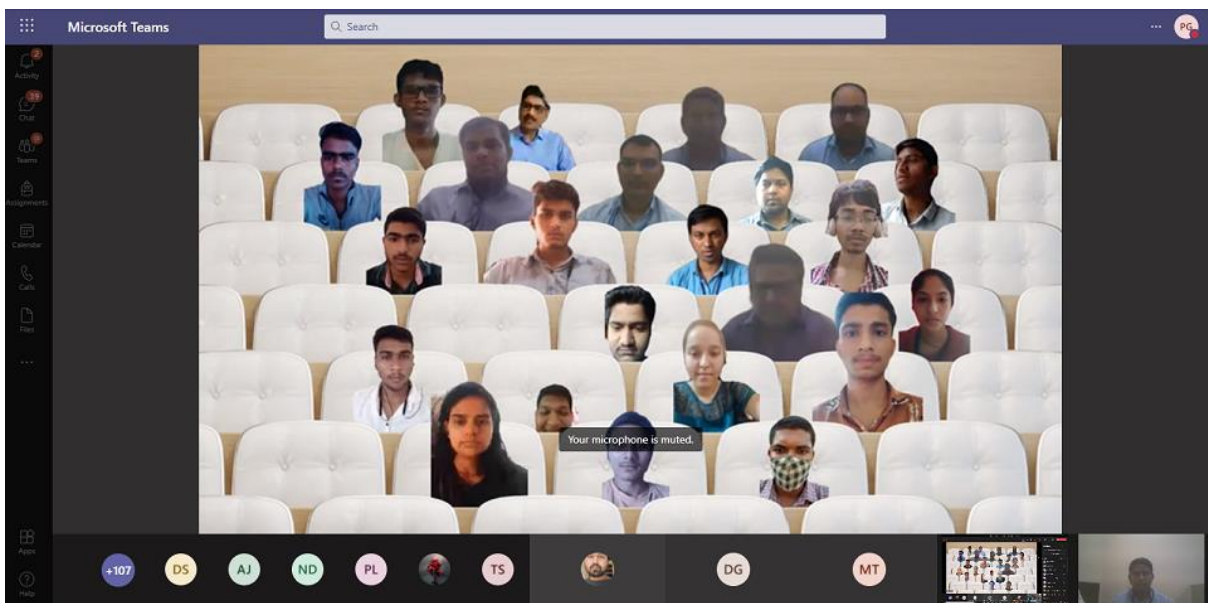
The slide also features a timer showing 42:43 and various Zoom controls like mute, video, chat, and share. The bottom of the screen shows a grid of participant avatars, including Dr. Anil Garje (Guest) and Tushar Shinde (SVKM...).

To end the session, Dr. Garje urged students to pursue research or start own business or start up instead of running after job.

Dr.Shakeelur Raheman proposed vote of thanks, by expressing his gratitude towards Institute management committee, principal, guest speaker, all teaching faculties, and at the end towards all first year students and participants for the success of day two session.



Day two session was concluded by Group photograph on MS Team.



DAY THREE

Monday, 14th July 2021

BASED ON

Subject: Engineering Mathematics

**Session Title: Applications of Differential Equations in
Engineering**

SESSION COORDINATORS

Mr. Chandu Koli

Mr. Lahu Aware

Mr. Prashant Gawade

RESOURCE PERSON

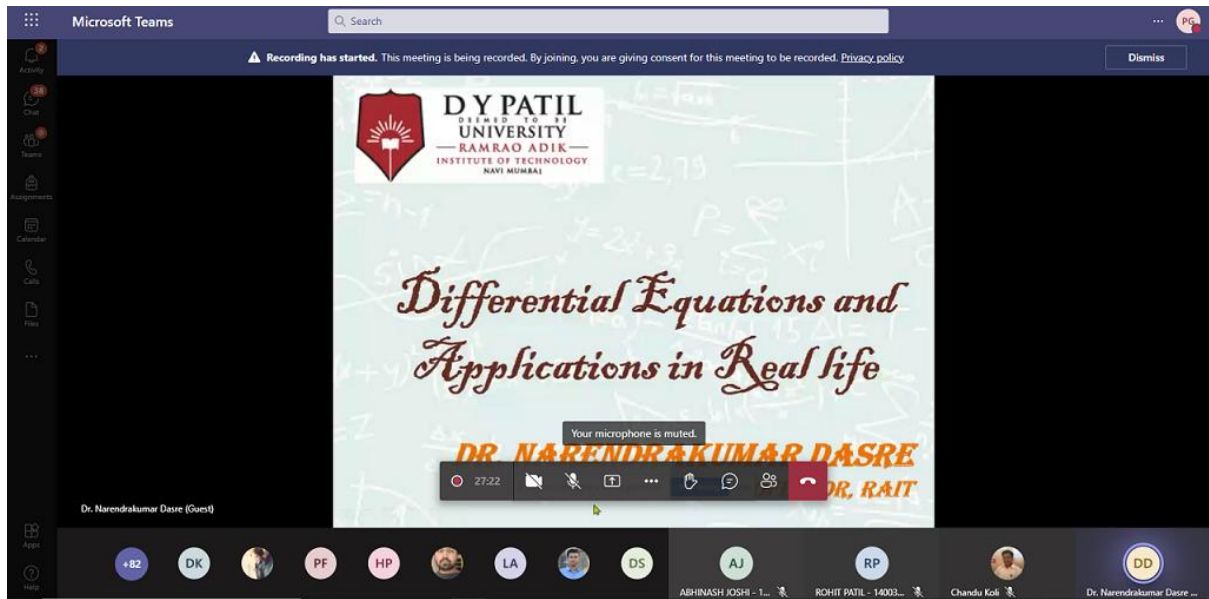
Dr. Narendrakumar Dasre, Associate Professor,
RAIT, D.Y. Patil Deemed University, Navi Mumbai

SESSION LINK:

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SESSION FEEDBACK LINK:

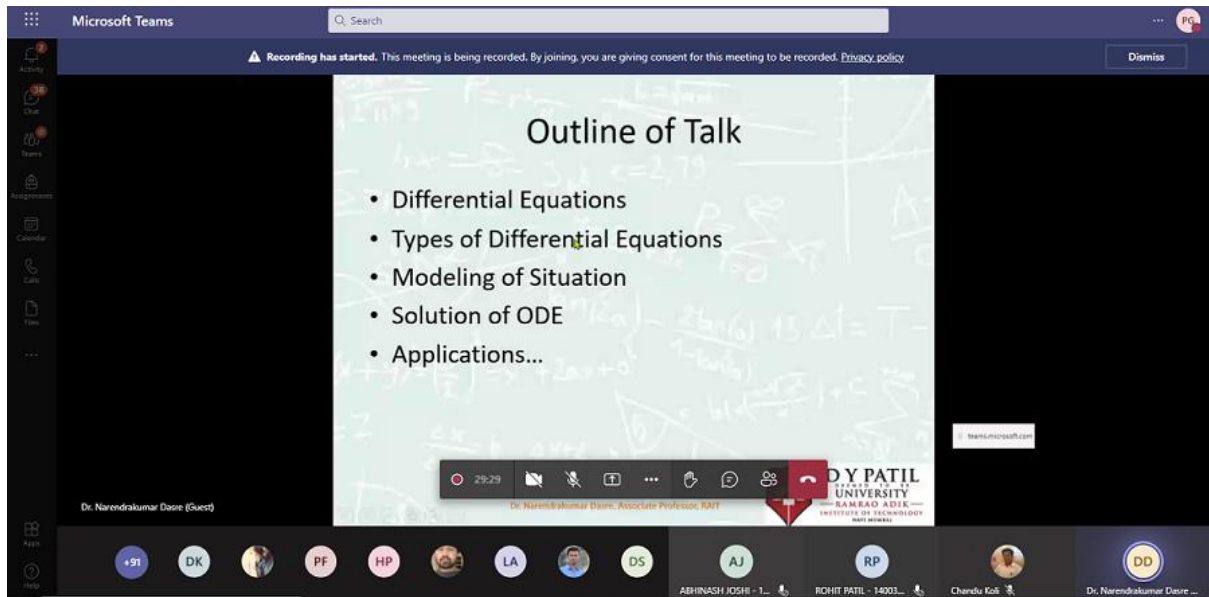
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To enlighten students on third day, Dr. Narendrakumar Dasre, Associate Professor, RAIT, D.Y. Patil Deemed University, Navi Mumbai was invited .Prof Chadu Koli gave brief introduction of guest.



To begin the session, Dr. Dasre explained basic concepts of differential equations, its characteristics, different types of differential equations and solution of differential equations in simple language. He took some real life examples and showed its mathematical formulation. Dr. Dasre also emphasized importance of differential equations in Civil, Mechanical, Electrical, E&TC branches by giving some real examples with mathematical interpretation.



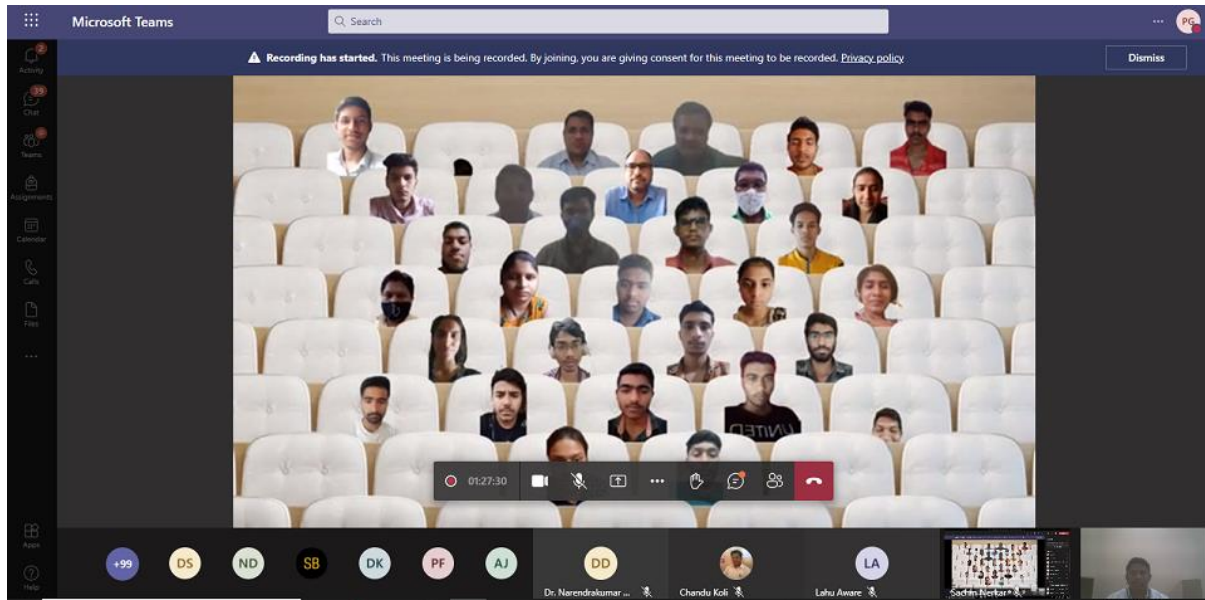
Dr. Dasre also talked about mathematical modelling in every branch of engineering. He also showed relation between system of differential equations and matrices with the Lotka-Volterra equations.



Prof. Lahu Aware proposed vote of thanks, by expressing his gratitude towards Institute management committee, principal, guest speaker, all teaching faculties, and

at the end towards all first year students and participants for the success of day two session. Prof. Prashant Gawade assisted in technical support.

Day three session was concluded by Group photograph on MS Team.



DAY FOUR

Monday, 15th July 2021

BASED ON

Subject: Communication Skills

**Session Title: Professional Communication Skills for
Engineers**

SESSION COORDINATORS

Mr. Rajiv Junne

Dr. Sambaji Rao

RESOURCE PERSON

Mr. Udaykumar Nikam, Assistant Professor,

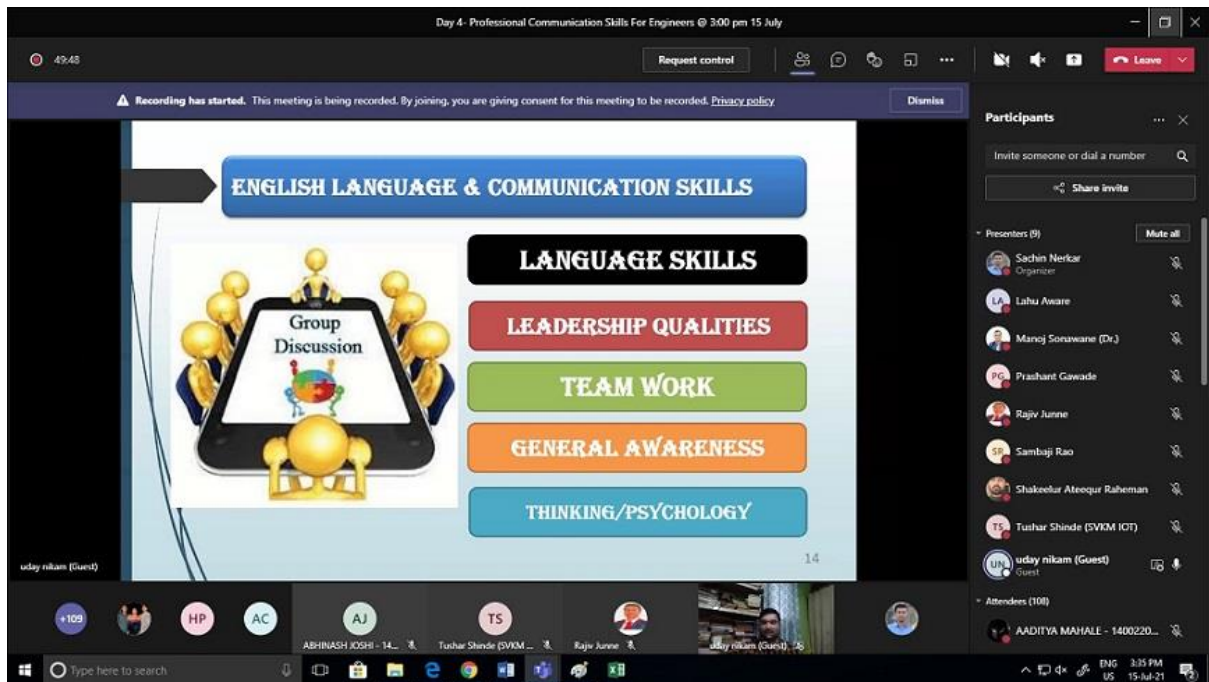
A.P.Shah Institute of Technology, Thane

SESSION LINK:

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SESSION FEEDBACK LINK:

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To enlighten students on final day, Mr. Udaykumar Nikam , Assistant Professor, A.P. Shah Institute of Technology, Thane was invited .Prof Rajiv Junne gave brief introduction of guest.



Prof. Nikam focused on various aspects of professional skills, leadership skills of English as a global language. He has stressed on the relevance of communication skills the career of engineering graduates.

ENGLISH LANGUAGE : AT EDUCATION

- A 2010 STUDY OF THE USE OF ENGLISH: 85 % OF PAPERS IN SCIENTIFIC PERIODICALS WERE WRITTEN IN ENGLISH.
- IN 2015, NEARLY 90% OF THE 1,500 PAPERS LISTED IN THE JOURNAL *LINGUISTICS ABSTRACTS* WERE IN ENGLISH.
- AT PRESENT THE ELT BUSINESS HAS BECOME ONE OF THE MAJOR GROWING INDUSTRIES AROUND THE WORLD.
- ENGLISH IS THE MEDIUM OF SCIENCE AND TECHNOLOGY.
- ENGLISH HAS BECOME A PREFERRED MEDIUM OF INSTRUCTION IN HIGHER EDUCATION FOR MANY COUNTRIES.

Prof. Nikam has also highlighted how non-verbal communication skills are equally important at workplace. He has also focused on the importance of innovative thinking as an engineering graduates.

COMPONENTS INVOLVED IN COMMUNICATION

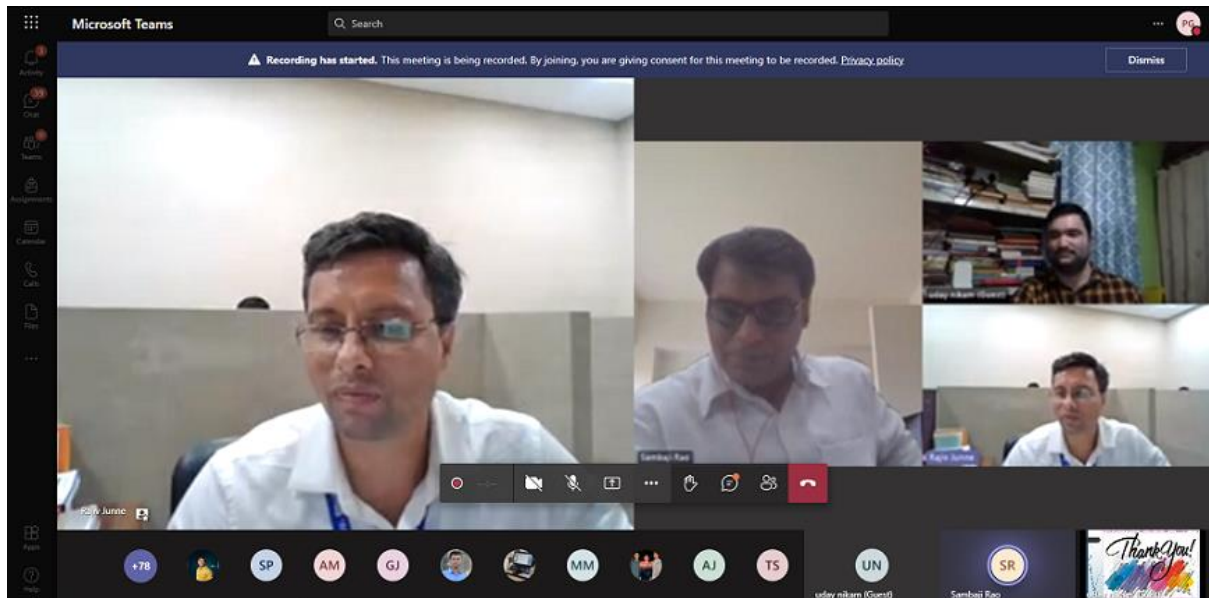
KEY ELEMENTS OF SUCCESSFUL COMMUNICATION

Percentage	Component
55%	body movements, face, ams...
38%	Voice tone, modulation, pauses...
7%	words

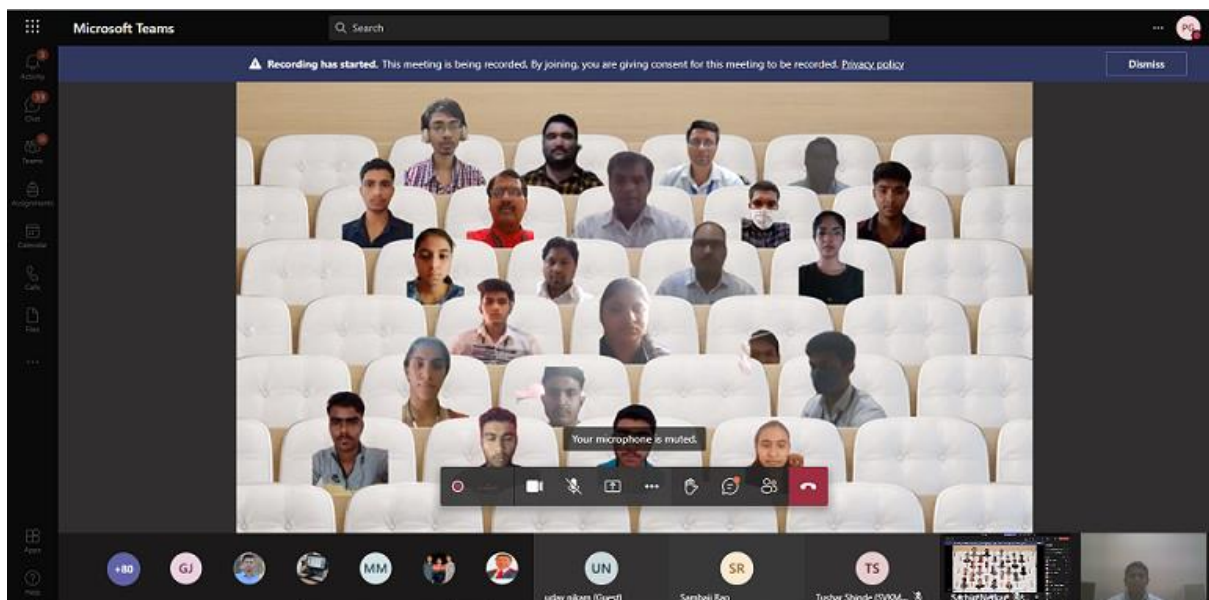
DR. ALBERT MEHRIBEAN
 > 7% SPOKEN WORDSS
 > 38% VOICE & TONE
 > 55% BODY LANGUAGE

Prof. Udaykumar Nikam has also highlighted the success of Indian tech giants like Sunder Pichai and Satya Nadela's success which is because of effective communication skills and appropriate body language.

Dr. Sambaji Rao proposed vote of thanks, by expressing his gratitude towards Institute management committee, principal, guest speaker, all teaching faculties, and at the end towards all first year students and participants for the success of day two session.



Day Four session was concluded by Group photograph on MS Team.



THANK YOU