MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE GWALIOR (M.P.)

CHEMICAL ENGINEERING DEPARTMENT

Volume 4 / Issue 1 January 2020 – July 2020

VISION

To be a leader in Chemical Engineering Education and Research by providing balanced learning and fostering research to enable the learners to meet the challenges of process industries and societal needs.

MISSION

- Share state of the art knowledge and facilities and enable optimal utilization of the resource in the region.
- To adopt good pedagogical practices and ethics in order to achieve excellence.
- Develop research culture and create a platform to disseminate research and development

ABOUT THE DEPARTMENT

The Chemical Engineering Department was started in 1996 it offers B.E. and MTech. courses in Chemical Engineering. Department was started with 30 students in undergraduate but latter on realizing the importance and need for Chemical Engineers, intake capacity raised to 60 in 2013-14. MTech. Course was started in 2013-14 with specialization in Chemical Engineering. The Department started with vision developing itself into academic excellence in Chemical Engineering and associated areas in order to develop competitive professionals and experts having knowledge, skills and attitude to serve the society and nation.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOS)

PEO1: Develop innovative products and services in the field of Chemical Engineering and Allied Engineering disciplines.

PEO2: Make use of Chemical Engineering with modern experimental and computational skills in higher education and research.

ACADEMIC ACTIVITIES (CONFERENCES & SEMINARS)

1. One Day Conference on
   Endowment of Chemical Engineering and Bio-Technology for Social Economic Development
   Dated: 29 June 2020
   Internal, Departmental Level

PAPERS PUBLISHED

1. **DFT Analysis of H2S Adsorbed Zigzag and Armchair Graphene Nanoribbons** by
   Dr. C.S. Malvi, Prof. Anish P. Jacob, Harshika Suman, Reena Srivastava, Sadhna Shrivatsava and Anurag Shrivastava in
   Chemical Physics Letters International
   SCI 1.912 Volume 745 1-9 Feb 2020

2. **Unidirectional Growth of Organic Single Crystals of Naphthalene, Anthracene and Pyrene by Isothermal Expansion of Supercritical CO2** by
   Dr. Antaram Sarve, Jimil George, Santosh Agrawal, Raksh Vir Jasra, Pradip Munshi in
   RSC Advances International
   SCI 3.049 10 22480-22486 JUNE, 2020

GATE QUALIFIED STUDENTS

NAME OF STUDENT	YEAR	MARKS OUT OF 100	AIR	REG. NO.
Harsh Shrivastava	2020	36.67	2302	CH20S35014110
Prashant Yadav	2020	35.67	2441	CH20S35014098
Sanjay Sahu	2020	32.67	2985	CH20S35014281
Anvi Jain	2020	38.33	2108	CH20S35014059
Sonali Padhi	2020	47	1266	CH20S35014101

CAT SCORE OF STUDENTS

Name of the Student	Year	Percentile	Reg. No.
Romsha Saxena	2020	95.78	9221330
Uttama Hande	2020	96.94	9210121

PLACEMENT DETAILS OF STUDENTS FOR THE YEAR 2019-2020

ON CAMPUS

Name of the Student	Passing Year	Company
Akansha Rathore	2020	TCS-NINJA
Praveen Kaurwar	2020	TCS-NINJA
Ashutosh Singh Chauhan	2020	L&T Infotech
Deep Singh Plaha	2020	L&T Infotech
Shakti Gupta	2020	L&T Infotech
Baasara Nizam	2020	Infosys
Harsh Shrivastava	2020	Infosys
Prashant Yadav	2020	Infosys

OFF CAMPUS

Name of the Student	Passing Year	Company
Akansha Rathore	2020	Accenture
Ambika Singh Tomar	2020	Accenture
Ashutosh Singh Chauhan	2020	Accenture
Deep Singh Plaha	2020	Accenture
Devyani Sharma	2020	Accenture
Kartikeya Pandey	2020	Accenture
Pradyuman Choubey	2020	Accenture
Praveen Kaurwar	2020	Accenture

INDUSTRY INTERACTION

The Department of Chemical Engineering organized **Five Live Interaction Sessions with Industry Personnel** in collaboration with the Finishing School Programme offered for 3rd year & final year students during May – June 2020 as equivalent to the Industrial Training/Internship mentioned in the Flexible Curriculum.

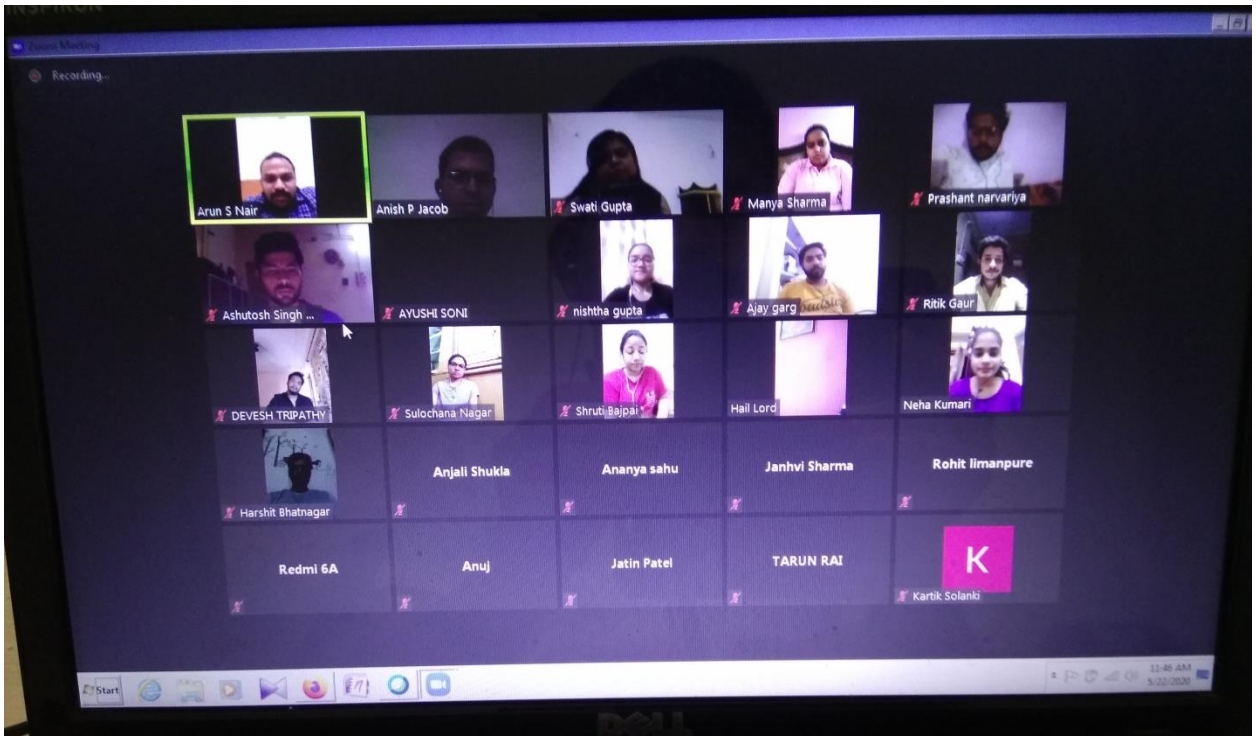
The sessions aimed at familiarizing the students with different industrial sectors relevant to Chemical Engineering & bridging the gap between academia & industry

Session 1: Live Interaction with

Mr. Arun S. Nair, Process Engineer (Production), Kuwait National Petroleum Company

on **22.05.2020.**

He has around 9 years of vast & rich experience in the Oil & Gas Sector.

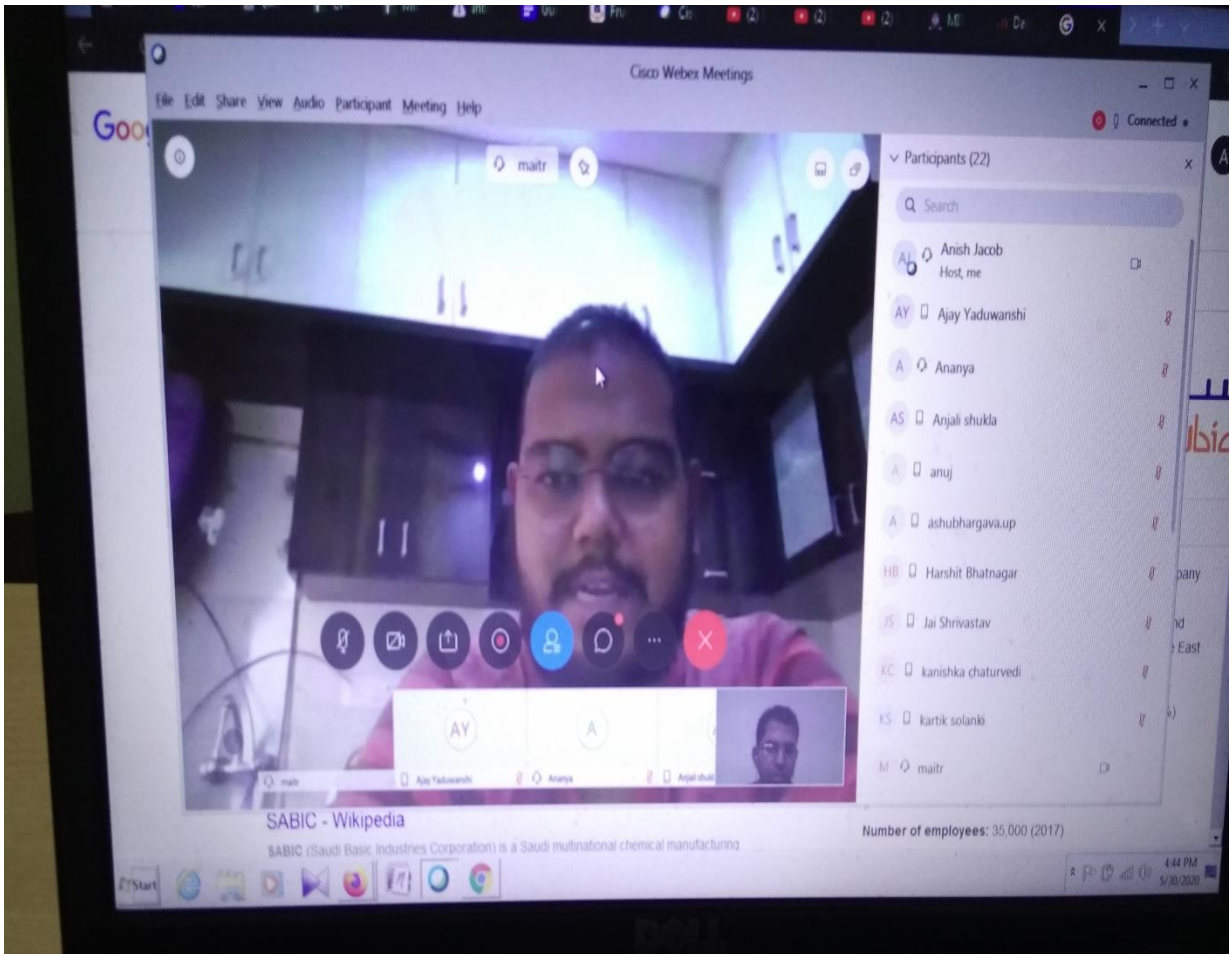


Session 2: Live Interaction with

Mr. Maharishi Maitra, Scientist, SABIC

on 30.05.2020.

He has worked in Dr. Reddy's Laboratories & Biocon and has an overall experience of 8 years in the pharmaceutical sector. Now he is working in the petrochemical sector.



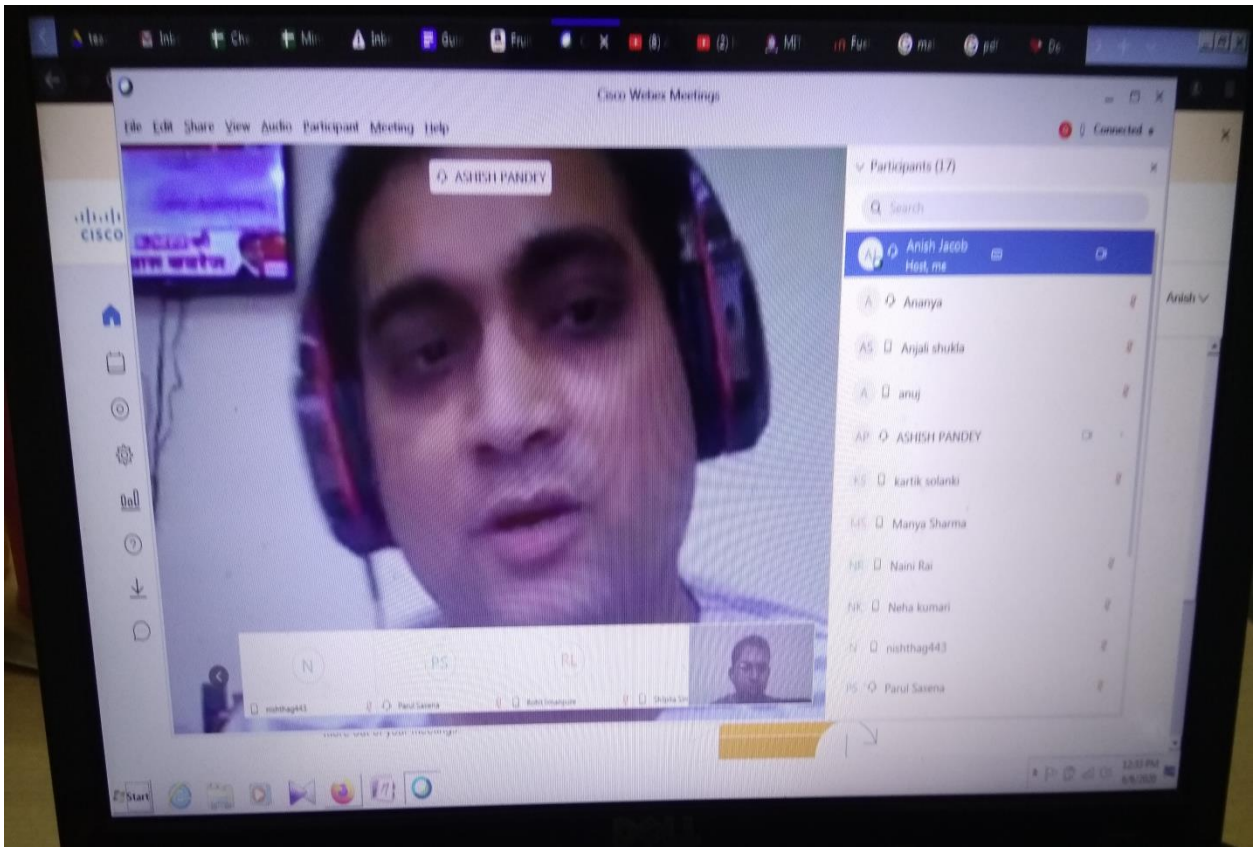
Session 3: Live Interaction with

Mr. Ashish Pandey, Shift Engineer,

Grasim Industries Ltd., Nagda

on 06.06.2020.

He is an Alumnus of the department & has also worked in DCM Shriram Industries, Kota and has an overall experience of 5 years in the Chemical sector



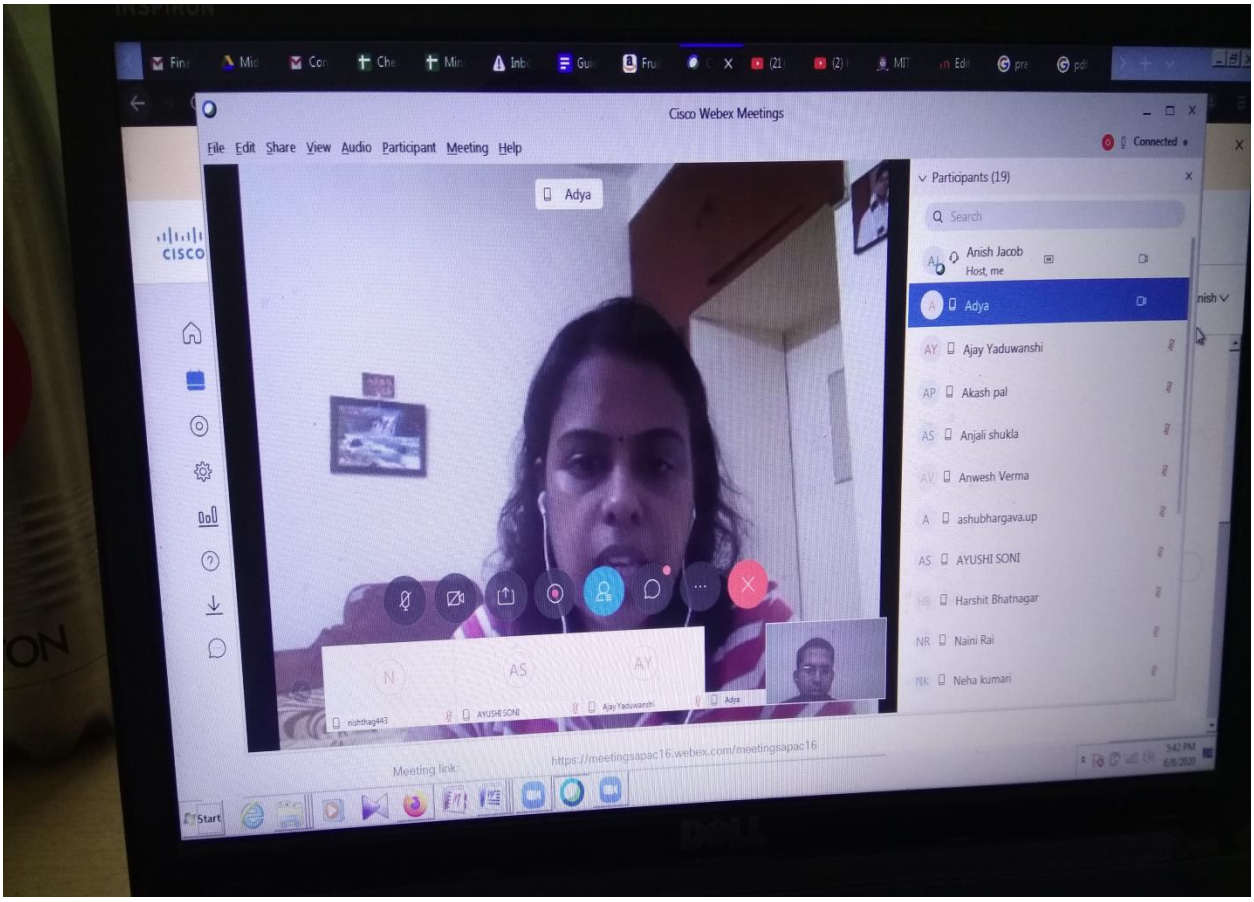
Session 4: Live Interaction with

Dr. Adya Karthikeyan, Senior Research Scientist,

Saint Gobain S. A., IITM Research Park, Chennai

on 08.06.2020.

She has completed her Doctoral Studies from Mc. Gill University, Montreal, Canada in the area of Heat transfer in nanofluids. She had been associated with Nuclear Power Corporation, Kudankulam, Tamil Nadu as a process engineer & was actively involved in the commissioning of the power plant there. Now she is involved in the R&D activities of Saint Gobain.



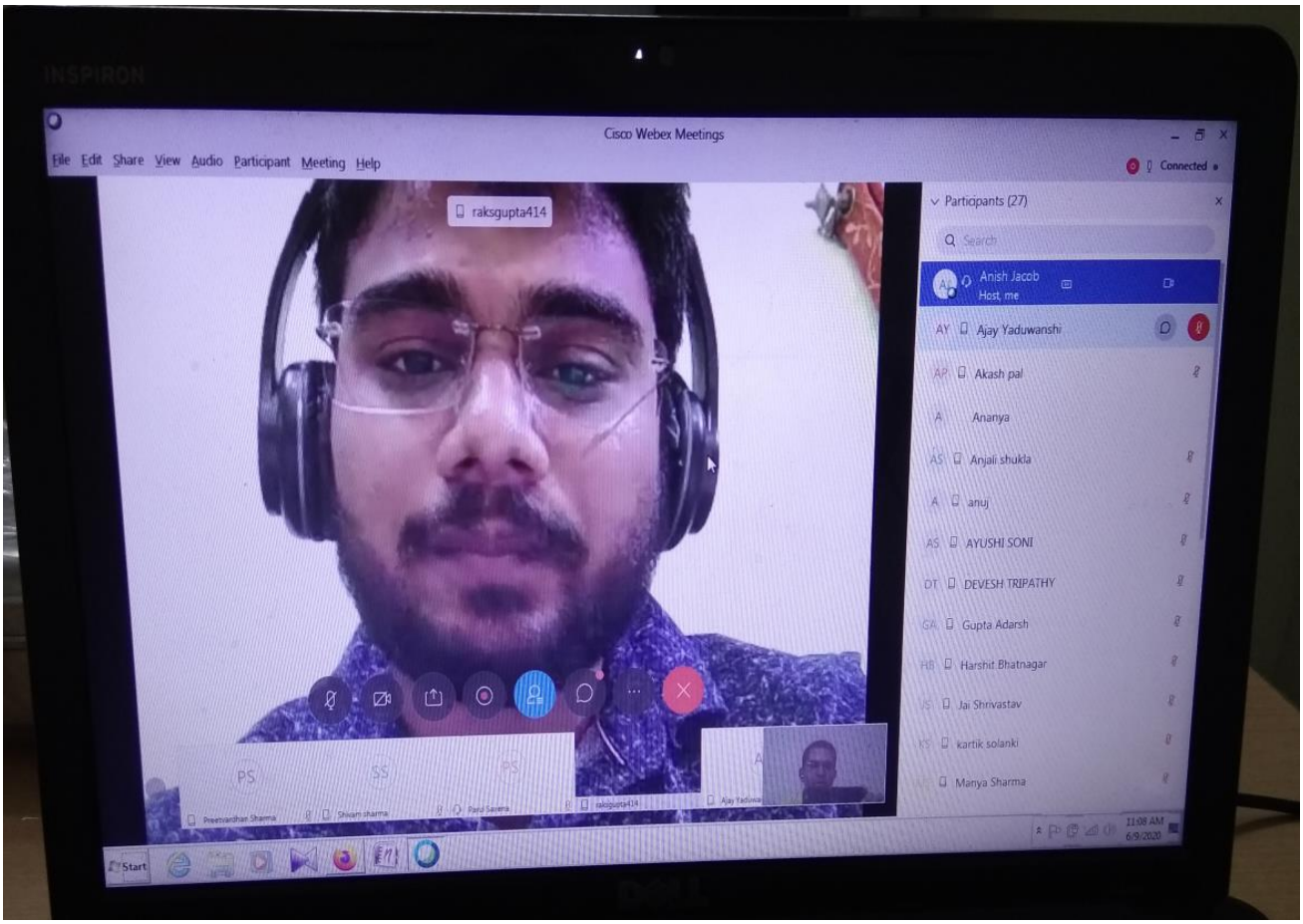
Session 5: Live Interaction with

Mr. Rakshit Gupta Sihare, Shift Incharge (Production),

Amoli Organics Pvt. Ltd., Vadodara, Gujarat

on 09.06.2020.

He is an Alumnus of the department & has an overall experience of 3 years in the Chemical sector.



ONLINE INTERNSHIP MODULES

MODULES FOR FIRST YEAR STUDENTS

1. **Chemical Reaction Engineering: A flyover between Nano and Macro World**
   Coordinated By: Dr. Arti Sahu and Prof. Pratap Singh
   Students Enrolled: 33

2. **Introduction of Mineral Processing and Challenges**
   Coordinated by: Dr. R. K. Dubey and Dr. S. R. Geed
   Students Enrolled: 07

FINISHING SCHOOL PROGRAMME FOR FINAL AND PRE-FINAL YEAR STUDENTS

1. **Process Integration & Automation in Chemical Industries**
   Coordinated by: Prof. Anish P. Jacob
   Prof. Swati Gupta
   Prof. Sulochana Nagar

   Students Enrolled: 44

NSS ACTIVITY FOR YEAR 2019-2020

Awareness Program on Health, Hygiene and Sanitation for the children who are living near MITS

Date: 20 February 2020
Duration: Two Hours
No. of Faculty: 05
No. of Students: 30

• एमआईटीएस में आयोजित कार्यक्रम में शिक्षण सामग्री के साथ बच्चे।

एमआईटीएस में स्वच्छता पर हुआ कार्यक्रम

एमआईटीएस में केमिकल इंजीनियरिंग विभाग के छात्रों ने रासेयो के तहत स्वास्थ्य व स्वच्छता पर जागरूकता कार्यक्रम का आयोजन किया। इसमें गोले का मंदिर उसके आसपास स्लम एरिया में रहने वाले बच्चों को स्वास्थ्य और स्वच्छता महत्व बताया गया। इस अवसर पर प्रो. अनीश पी जैकब, डॉ. आरती साहू, ड ज्योति विमल, डॉ. मनीष सागर सहित अन्य छात्र-छात्राएं मौजूद रहे।

STUDENT PARTICIPATION IN TECHNICAL EVENTS OUTSIDE INSTITUTE

Name of the Student/activity	Date	Details	Duration	Level	Achievement
Tata Crucible Quiz/ Vishal Shrivastava	23/01/2020	Secured 3rd position in the Regionals of Tata Crucible Quiz organized at Bhopal.	1 Day	Regional	3rd position
Combined Annual Training Camp / Shivam Sharma	18/01/2020 to 27/01/2020	Attended the Combined Annual Training Camp held at Gwalior	10 days		1st position in volleyball

STUDENT PARTICIPATION IN SPORTS/ EXTRA-CURRICULAR/ CULTURAL ACTIVITY OUTSIDE THE INSTITUTE

Name of the Student/activity	Date	Details	Duration	Level	Achievement
Preetvardhan Sharma /Band Competition by Prestige institute of Management	21/10/2019	PREET VARDHAN SHARMA PARTICIPATED IN THE MUSICAL BAND ORGANIZED BY PRESTIGE INSTITUTE OF MANAGEMENT , GWALIOR, HE SHOWED HIS SKILL BY PLAYING KEYBOARD IN THE EVENT	1 Day	State	Winner

INNOVATIONS INTRODUCED

ONLINE FEEDBACK USING MOODLE

The constraints of pen and paper method of receiving feedbacks are many, which render the whole process meaningless. The main constraints in this method are- cost of printing which increases with the increase in number of questions. Moreover, the students lose interest in filling those never-ending sheets of paper, and the sheets from the booklets also. In such scenario, the data obtained, from the feedback are not complete and are unreliable. In addition to that, this data can't be analyzed deeply, without investing tremendous amount of resources.

In such a scenario, this year, the student feedback about different Faculty member and courses has been obtained using an online platform, MOODLE. Use of MOODLE for obtaining feedback has resulted in overwhelming participation from students. Moreover, the completeness of data is also guaranteed. The length of feedback questionnaire can be increased without any problem. In addition to that, the data obtained can be analyzed in multitude ways, very easily.

INTRODUCTION OF NPTEL COURSES UNDER SWAYAM

During the last few years, the awareness among engineering students about social media has increased exponentially. The inclination among present day students is towards learning from online platforms, where they can learn at their own pace in their own time, at a place of their choice. SWAYAM is an initiative whose motive is to exploit this tendency of students for online learning.

The lectures of the courses are available on YouTube platform, where a student can watch them and learn. These courses also include assignments given by Instructors assigned to these courses. These assignments are submitted using Google Classroom, which facilitates transparency and continuity in the evaluation of students. Moreover, a student receives prompt results.

EDITORIAL BOARD