



**Dr. S. & S. S. Gandhi College of
Engineering & Technology, Surat**

METALLURGY DEPARTMENT

**CO-CURRICULAR
&
EXTRA-CURRICULAR
ACTIVITIES**



**Year
2020-2021**

LIST OF ACTIVITIES

Year – 2020-2021

SR. NO.	NAME OF ACTIVITY	DATE
1	International Yoga Day Celebration	21/06/2020
2	COVID 19 Awareness Quiz	13/10/2020
3	Webinar Series “Recent Trends in Metallurgy”	19/10/2020 to 23/10/2020
4	COVID Pledge Ceremony	05/11/2020
5	Webinar on SSIP Awareness	05/12/2020
6	Student Follow Up Industrial Visit: Hazira Refractory, Surat	10/03/2021
7	Student Follow Up Industrial Visit: JMT, Sachin	10/03/2021
8	Student Follow Up Industrial Visit: Crescent Foundry Pvt Ltd, Vadodara	12/03/2021
9	Student Follow Up Industrial Visit: Gujarat Switch Gear Manufacturing Com, Khambhat	12/03/2021
10	Student Follow Up Industrial Visit: Vertex Aluminum Extrusion, Surat	15/03/2021
11	Student Follow Up Industrial Visit: Kalpataru Power Transmission, Gandhinagar	15/03/2021
12	Student Follow Up Industrial Visit: JMT, Udhna	16/03/2021

INTERNATIONAL YOGA DAY CELEBRATION

Date: 21st June, 2020

In view of the pandemic situation (COVID-19), this time the International Yoga Day was celebrated under the campaign of "Do yoga Beat Corona". As part of state-wide public awareness, faculty and staff members along with students were asked to post photographs/video of Yoga posture on social media with a hash tag of #DoYogaBeatCorona, #GujaratStateYogaBoard, #GTU.

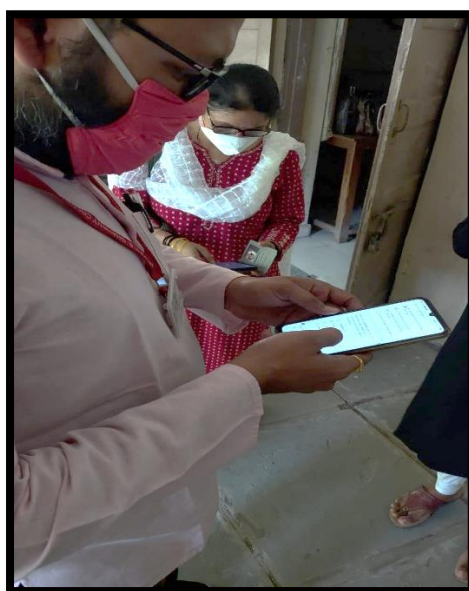
Dr. S.& S. S. Ghandhy college of Engg. & Tech. family members were asked to join for yoga practice through Facebook page of Gujarat yoga board on 21/06/2020 at 7:00 am from their residence.



COVID 19 AWARENESS QUIZ

Date: 13th October, 2020

Covid-19 awareness quiz was organized by National Service Scheme (NSS) local unit of Dr. S. & S. S. Ghandhy College of Engg. & Tech., Surat to spread the awareness among faculties and students on 13th October, 2020. All the faculty members of the department and students participated in the quiz.



WEBINAR SERIES

“RECENT TRENDS IN METALLURGY”

Date: 19th October, 2020 to 23rd October, 2020

Five days webinar series on “Recent Trends in Metallurgy” was organized for students, faculties and industry personnel by Metallurgy Department, Dr. S. & S. S. Ghandhy College of Engineering & Technology, Surat from 19/10/2020 to 23/10/2020. 162 candidates participated in this webinar series.

This webinar series was mainly focused on recent trends in steel industries, ceramics and composites materials, mechanical testing and non-ferrous industries. Eminent speakers from esteemed organizations shared their knowledge with participants in this series. Details of the eminent speakers and topics were shown in webinar browser.

Webinar Series on
“RECENT TRENDS IN METALLURGY”
19th to 23rd OCTOBER 2020

Organized By
Metallurgy Department
Dr. S. & S. S. Ghandhy College of Engg. & Tech., Surat



Organized By
Metallurgy Department
Dr. S. & S. S. Ghandhy College of Engg. & Tech., Surat



Mr. Rajesh Goyal
Assistant Vice President
Welspun Corp., Anjar

Topic: Metallurgy of linepipe Steel
Date: 19th October 2020
Time: 03:00 to 05:00 PM



Dr. Manish Patel
Scientist - E
Defence Metallurgical
Research Lab.,
Hyderabad

Topic: Advanced Ceramics & Composites
Date: 20th October 2020
Time: 03:00 to 05:00 PM



Mr. Raghu Shant
Assistant General Manager,
JSW Steel, Karnataka

Topic: Corrosion in Linepipe Steel
Date: 21st October 2020
Time: 03:00 to 05:00 PM



Mr. Adya Charan Arohi
Research Scholar,
IIT Kharagpur, West Bengal

Topic: Mechanical Testing of Metals & Alloys
Date: 22nd October 2020
Time: 03:00 to 05:00 PM



Mr. Raghavendra Joshi
Partner,
Aadhya Engineering, Vadodara

Topic: Challenges & Opportunities in Non-Ferrous foundries
Date: 23rd October 2020
Time: 03:00 to 05:00 PM

Registration Link:
<https://forms.gle/RsbAii2WXQx5uf478>

- All sessions will be conducted on Google Meet.
- E-certificates will be provided to registered participants who will attend all the sessions and fill daily feedback

PATRON
Mr. N. A. Sangani
Principal
Dr. S. & S. S.
Ghandhy College
of Engg. & Tech.,
Surat

CONVENER
Mrs. B. H. Goyal
HoD
Dr. S. & S. S.
Ghandhy College
of Engg. & Tech.,
Surat

ORGANIZING COMMITTEE:
Mr. S. F. Parmar
Ms. S. M. Patel
Mr. M. J. Joshi
Mr. T. K. Kyada
Mr. R. D. Dave
Mr. N. G. Patel
Mr. A. M. Gautam

GLIMPSES OF THE EVENT

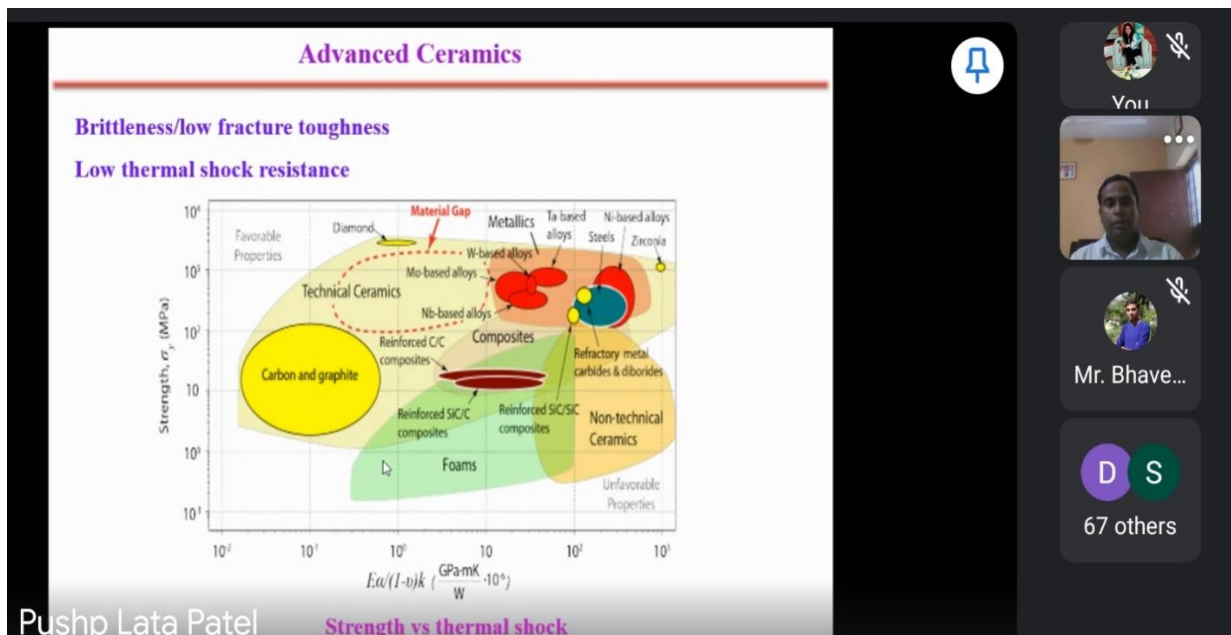
DAY 1

Day 1 session “**Metallurgy of Line Pipe Steel**” was conducted by Mr. Rajesh Goyal, Assistant Vice President, Welspun Corp., Anjar.



DAY 2

Day 2 session “**Advanced Ceramics & Composites**” was conducted by Dr. Manish Patel, Scientist E, DMRL, Hyderabad.



DAY 3

Day 3 session “Corrosion in Linepipe Steel” was conducted by Mr. Raghu Shant, Assistant General Manager, JSW Steel, Karnataka.

The diagram illustrates the flow of oil and gas from extraction to distribution. It shows gas wells and shale plays feeding into gas gathering pipelines, which lead to gas processing plants. From there, gas is transported via transmission pipelines to gas distribution networks. Oil wells and shale plays feed into oil gathering pipelines, which lead to oil processing plants. Oil is then transported via transmission pipelines to oil refineries. The diagram also shows propane trucks and oil unit trains. A legend indicates that yellow represents crude oil (may contain gas/liquids) and blue represents natural gas (may contain gas/liquids). The diagram is titled "Types of Pipelines in Oil and Gas Industry" and includes the text "Gathering Pipelines Transmission Pipelines".

Source: GAO, | GAO-14-667

Raghu Shant

meet.google.com is sharing your screen. Stop sharing Hide

DAY 4

Day 4 session “Mechanical Testing of Metals & Alloys” was conducted by Mr. Adya Charan Arohi, Research Scholar, IIT Kharagpur, West Bengal.

Summary

Basics of Tension

- To perform the tension, fatigue and nano indentation tests
- Difference between High and Low cycle fatigue
- Different kinds of stress strain curve, hysteresis loops, cyclic hardening and softening behaviour
- To improve the mechanical properties
- Failure analysis of Tension and fatigue tests

Ti-5553 Work

- High temperature homogenization leads to more uniform microstructure and removes the dendritic structure.
- Ti-5553-F and Ti-5553-R have almost same volume fraction of α_2 even if the degree of deformation is changed. Both bimodal microstructure have nearly same hardness.
- The localized strain measured during tensile test is getting concentrated at the mid of gauge length. It reaches to a value of 2.3 % which is 65 % higher than the average strain to failure.

Multiaxial Fatigue

- The yield strength and UTS of IMI 834 alloy at room temperature is found to be 994 ± 21 and 1084 ± 26 MPa. The alloy possess a good ductility of 11.8 ± 0.5 %.
- The material exhibits lowest fatigue life under combined axial-torsion fatigue load amongst all the cases.
- Neither cyclic hardening nor cyclic softening has been observed in the case of pure axial fatigue. Whereas cyclic softening has been observed in pure torsion fatigue.
- The orientation of the crack path and fracture mode are dependent on the degree of multiaxiality.
- The pure axial fatigue samples fractured at an angle of 90° to the axis of loading conditions whereas pure torsion fatigue samples were fractured at an angle of 45° to the axis of loading. While in the case of combined axial torsion fatigue, mixed axial as well as helical fractures were seen.

Oct 22, 2020

“Recent Trends in Metallurgy”

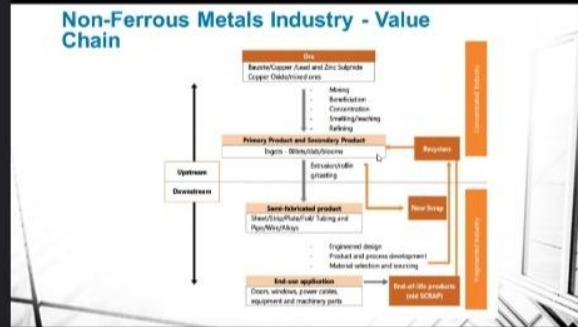
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DAY 5

Day 5 session “CHALLENGES & OPPORTUNITIES IN NON-FERROUS FOUNDRIES” was conducted by Mr. Raghavendra Joshi, Partner, Aadhya Engineering Vadodara.



Day 5 Webinar Serie... ▶



raghavendra joshi

You

raghaven...

Pradeep

42 others

COVID PLEDGE CEREMONY

Date: 05th November, 2020

Covid pledge was taken by all the department faculty members on 5th November, 2020.

प्रतिज्ञा

मैं ————— संकल्प लेता/लेती हूँ कि मैं कोविड-19 के बारे में सतर्क रहूँगा/रहूँगी और मुझे और मेरे साथियों को इससे जुड़े खतरे को हमेशा ध्यान में रखूँगा/रखूँगी।

मैं इस घातक विषाणु के प्रसार को रोकने संबंधी सभी आवश्यक सावधानियाँ बरतने का वचन देता/देती हूँ। मैं कोविड से जुड़े आचार-व्यवहार का अनुसरण करने और दूसरों को भी इसके लिए प्रोत्साहित करने का भी वचन देता/देती हूँ।

मैं सदैव माँस्क/फेस कवर पहनूँगा/पहनूँगी, विशेषकर सार्वजनिक स्थलों पर।

मैं दूसरों से कम-से-कम 2 गज की दूरी बनाकर रहूँगा/रहूँगी।

मैं अपने हाथों को नियमित रूप से और अच्छी तरह साबुन और पानी से धोऊँगा/धोऊँगी।

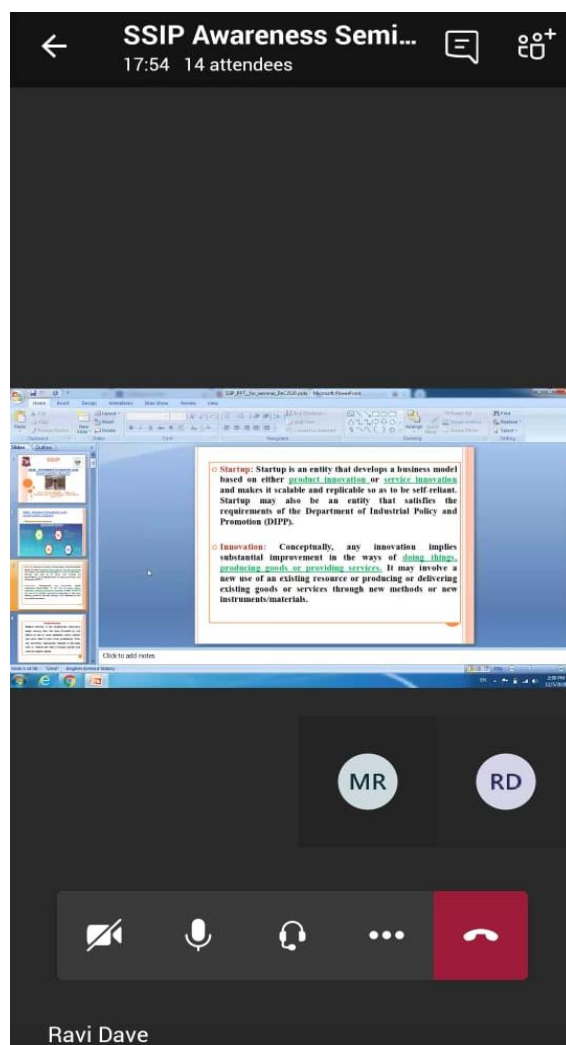
हम एक साथ मिलकर कोविड-19 के खिलाफ इस लड़ाई को जीतेंगे।



WEBINAR ON SSIP AWARENESS

Date: 05th December, 2020

The Metallurgy Department organized a webinar on SSIP awareness for first-year students, which took place on May 12, 2020. This webinar aimed to familiarize attendees with the SSIP program and its significance in the realm of innovation and entrepreneurship. Through this initiative, students had the opportunity to gain insights into the various aspects of SSIP and how it supports innovative ideas and concepts. The webinar served as a platform for students to understand the role of SSIP in fostering a culture of innovation within the academic and entrepreneurial spheres. Overall, the event provided valuable knowledge and awareness about SSIP to the participants, empowering them with essential information for their academic and professional endeavours. Webinar was attended by a total of thirteen students.



STUDENT FOLLOW UP INDUSTRIAL VISIT

HAZIRA REFRACTORY, SURAT

Date: 10/03/2021

On March 10, 2021, Sonam Patel conducted a thorough follow-up visit to Hazira Refractory in Surat, overseeing six students under her guidance. With meticulous attention to detail, she ensured strict adherence to industrial training guidelines, placing particular emphasis on safety protocols and best practices in refractory manufacturing. She actively facilitated hands-on learning experiences, encouraging students to immerse themselves in the manufacturing process and acquire practical insights into the complexities of refractory production. Collaborating closely with company mentors, including Mr. Vikash, she personalized the follow-up visit to address the unique needs of each student, fostering a supportive learning environment conducive to their growth and development.



STUDENT FOLLOW UP INDUSTRIAL VISIT

JMT, SACHIN

Date: 10/03/2021

Ravi Dave's follow up visit to JMT in Sachin, Surat, on March 10, 2021, exemplified his dedication to guiding students through their industrial training journey. Tasked with overseeing the progress of six students, he assumed a multifaceted role as mentor, educator, and industry liaison. Conducting comprehensive assessments of students'

performance, he provided constructive feedback to enhance their skill development and proficiency in industrial practices. Through his visit, he aimed to instil in students a sense of responsibility, resilience, and adaptability essential for navigating the complexities of the industrial landscape.



STUDENT FOLLOW UP INDUSTRIAL VISIT

CRESCENT FOUNDRY PVT LTD, JAMBUSAR, VADODARA

Date: 12/03/2021

On March 12, 2021, Suresh Parmar, conducted a follow-up visit to Crescent Foundry Pvt Ltd in Jambusar, Baroda. His objective was to monitor the progress of a student undergoing industrial training. He meticulously assessed how the student applied theoretical knowledge to practical tasks. He engaged with company personnel to ensure the student received exposure to various aspects of the manufacturing process, emphasizing hands-on experience.



STUDENT FOLLOW UP INDUSTRIAL VISIT
GUJARAT SWITCH GEAR MANUFACTURING COMPANY,
KHAMBHAT

Date: 12/03/2021

On March 12, 2021, Mandar Joshi visited Gujarat Switch Gear Manufacturing Company in Khambhat to monitor students' progress and offer support. He assessed students' practical proficiency and collaborated with mentors for improvement. He emphasized adaptability and problem-solving, encouraging lifelong learning.



STUDENT FOLLOW UP INDUSTRIAL VISIT
GUJARAT SWITCH GEAR MANUFACTURING COMPANY,
KHAMBHAT

Date: 15/03/2021

On March 15, 2021, Tushal Kyada conducted a follow-up visit to Vertex Aluminium Extrusion in Kim, Surat. He oversaw the progress of six students undergoing training, providing guidance and mentorship to ensure their integration into the company's operations. Collaborating with mentors, he tailored training modules to align with students' backgrounds and aspirations, fostering a dynamic learning environment.



STUDENT FOLLOW UP INDUSTRIAL VISIT

KALPATARU POWER TRANSMISSION, GANDHINAGAR

Date: 15/03/2021

On March 15, 2021, Achit Gautam visited Kalpataru Power Transmission in Gandhinagar for a routine follow-up. He oversaw a student's progress in industrial training, sharing practical insights into power infrastructure projects. He encouraged student interaction with industry professionals, promoting a culture of learning and innovation.



STUDENT FOLLOW UP INDUSTRIAL VISIT

KALPATARU POWER TRANSMISSION, GANDHINAGAR

Date: 16/03/2021

On March 16, 2021, Nirmal Patel visited JMT in Udhana, Surat for a follow-up. He supervised five students, monitoring their progress. He identified areas for improvement and provided targeted support to enhance students' professional growth.

