

A Report on

GTU Sponsored &ISTE Approved
One Week Faculty Development Program (FDP) on

“Advancement in welding & Non-Destructive Testing”

18thNovember to 23rd November 2019

ORGANIZED BY

MECHANICAL ENGINEERING DEPARTMENT

TAPI DIPLOMA ENGINEERING COLLEGE, SURAT

Event Convener

Mr. Jayesh D. Ramani (HOD-MED.TDEC)

Event Coordinator

Dr. Chirag R. Sanghani (Sr. Lecturer- MED, TDEC)

Event Co-COORDINATORS

Mr. Jayesh V. Savaj (Lecturer- MED, TDEC)

Mr. Vishal J. Rana (Lecturer- MED, TDEC)

OBJECTIVES OF FDP

- To expose industry based welding methodologies (standard procedure, welder's specification, defects, testing, etc.) to the participants to prepare them for dissemination of new and emerging technologies, perhaps as content beyond syllabus, to their students by case studies.
- To make participants aware about the current research & development trends in the field of welding like advanced welding techniques, challenges in welding, etc. with the help of expert's knowledge. So, they can use this information in their further study or research work.
- To enrich participants with various non-destructive testing methods for welding by theory and practical demonstration.
- To familiarize the participants with the use of simulation tool in welding by hands on session on welding process simulation in ANSYS software.

SCHEDULE OF FACULTY DEVELOPMENT PROGRAM

TAPI DIPLOMA ENGINEERING COLLEGE, SURAT MECHANICAL ENGINEERING DEPARTMENT SCHEDULE OF FACULTY DEVELOPMENT PROGRAM (FDP) "ADVANCEMENT IN WELDING & NON DESTRUCTIVE TESTING"				VENUE
MONDAY (18/11/2019)				
9.30 AM TO 10.15 AM	REGISTRATION & BREAKFAST			WORKSHOP
10.15 AM TO 11.00 AM	INAUGURAL CEREMONY			T- 7
11.00 AM TO 12.40 PM	LECTURE	DR. V. J. BADIKA (DDPL)	ADVANCED WELDING TECHNIQUES	S- 23
12.30 PM TO 1.30 PM	LUNCH BREAK			WORKSHOP
1.30 PM TO 2.30 PM	LECTURE	DR. V. J. BADIKA (DDPL)	WELDING DEFECTS	S- 23
2.30 PM TO 2.45 PM	TEA BREAK			S- 22
2.45 PM TO 5.00 PM	THEORY & PRACTICAL SESSION	MR. HEMANT DESAI (DIIS)	DYE PENETRATION TEST	T- 7
TUESDAY (19/11/2019)				
10.00 AM TO 10.30 AM	BREAKFAST			WORKSHOP
10.30 AM TO 12.00 PM	LECTURE	MR. NIKHIL SABLAYA (TCR ADVANCED)	BOILER INSPECTION	S- 23
12.00 PM TO 1.00 PM	LUNCH BREAK			WORKSHOP
1.00 PM TO 2.30 PM	THEORY & PRACTICAL SESSION	MR. HEMANT DESAI (DIIS)	ULTRASONIC TEST	T- 7
2.30 PM TO 2.45 PM	TEA BREAK			S- 22
2.45 PM TO 5.00 PM	THEORY & PRACTICAL SESSION	MR. HEMANT DESAI (DIIS)	MAGNETIC PARTICLE TEST	T- 7
WEDNESDAY (20/11/2019)				
10.00 AM TO 10.30 AM	BREAKFAST			WORKSHOP
10.30 AM TO 12.00 PM	LECTURE	MR. MADHAV PISPATIKAR (VELMET TECH)	WELDING INSPECTION & WPS FOR	S- 23
12.00 PM TO 1.00 PM	LUNCH BREAK			WORKSHOP
1.00 PM TO 2.30 PM	LECTURE	MR. PRATIK GANDHI (L&T, HAZIRA)	TITANIUM WELDING	S- 21
2.30 PM TO 2.45 PM	TEA BREAK			S- 22
2.45 PM TO 5.00 PM	LECTURE	MR. K. L. PANDEY (LINCOLN ELECTRIC)	PARAMETERS AFFECTING SUBMERGED ARC WELDING	S- 23
THURSDAY (21/11/2019)				
10.00 AM TO 10.30 AM	BREAKFAST			WORKSHOP
10.30 AM TO 12.00 PM	LECTURE	PROF. Y. S. CHOUPARE (TDRC)	ART OF LIVING	S- 23
12.00 PM TO 1.00 PM	LUNCH BREAK			WORKSHOP
1.00 PM TO 5.00 PM	VISIT	ADVANCED WELDING LABORATORY (SVNIT)	REF. DR. V. D. KALYANKAR	SVNIT
FRIDAY (22/11/2019)				
10.00 AM TO 10.30 AM	BREAKFAST			WORKSHOP
10.30 AM TO 12.00 PM	LECTURE	DR. V. D. KALYANKAR (SVNIT)	CHALLENGES IN WELDING	S- 23
12.00 PM TO 1.00 PM	LUNCH BREAK			WORKSHOP
1.00 PM TO 2.30 PM	LECTURE	DR. V. D. KALYANKAR (SVNIT)	TESTING OF WELDED PARTS	S- 23
2.30 PM TO 2.45 PM	TEA BREAK			S- 22
2.45 PM TO 5.00 PM	PRACTICAL SESSION	MR. DIXIT MISTRY (SOPAN INSTITUTE)	SIMULATION OF WELDING	217 B, DEGREE BUILDING
SATURDAY (23/11/2019)				
10.00 AM TO 10.30 AM	BREAKFAST			WORKSHOP
10.30 AM TO 12.30 PM	PRACTICAL SESSION	MR. DIXIT MISTRY (SOPAN INSTITUTE)	SIMULATION OF WELDING	217 B, DEGREE BUILDING
12.30 PM TO 1.30 PM	LUNCH BREAK			WORKSHOP
1.30 PM TO 3.00 PM	LECTURE	DR. AMIT ARORA (ITGN)	MODELING OF WELDING PROCESS	S- 23
3.00 PM TO 3.30 PM	EXAM			S- 23
3.30 PM TO 3.45 PM	TEA BREAK			S- 22
3.45 PM TO 4.45 PM	VALIDICTORY FUNCTION			T- 7

Day 1 (18/11/2019)

Inauguration Program



Inauguration of FDP by **Dr. Atul Shah** (Chief Guest), **Dr. Kanubhai Mavani** (Trustee- STBS Trust), **Shri K.D.Vaghani** (Tresurer – STBS Trust), Hon. Guest **Shri Amit Joshi** (Manager-HR, L&T), **Dr. Nanak J. Pamnani** (Principal-SSASIT) and **Prof. Y.S.Choupare** (Principal-TDEC)



Session 1: **Dr. V.J.Badheka** (PDP) delivered expert lecture on "*Advanced Welding Techniques*"
Session 2: **Dr. V.J.Badheka** (PDP) delivered expert lecture on "*Welding Defects*"
Session 3: Theory and Practical session conducted by **Mr. Hemant Desai** on "*Dye Penetration Test*"

Day 2 (19/11/2019)



Session 1: Mr. Nikhil Sabhaya (TCR Advanced Engineering Pvt. Ltd.) delivered expert lecture on "Boiler Inspection"

Session 2: Theory and Practical session on "Ultrasonic test" and "Magnetic Particle test" by Mr. Hemant Desai (Desai Industrial Inspection Service)

Day 3 (20/11/2019)



Session 1: Mr. Madhav Pispatkar (Welmet Tech.) delivered an expert lecture on WPS & PQR.

Session 2: An expert lecture on Titanium Welding by Mr. Pratik Gandhi (L&T-Hazira)

Session 3: Mr. K.L.Pandey (Lincon Electric) delivered lecture on Parameters affecting on SAW.

Day 4 (21/11/2019)



Session 1: Prof. Y.S.Choupare (Principal-TDEC) delivered expert lecture on “Art of Living”
Session 2 & 3: Theory & Practical (with hands-on) session in “Advanced Welding Laboratory”
(SVNIT).

Day 5 (22/11/2019)



Session 1: Expert Lecture on “Challenges in Welding” delivered by Dr. V.D.Kalyankar
Session 2: Expert Lecture on “Testing of Welded Parts” delivered by Dr. V.D.Kalyankar
Session 3: Practical Hands-on session on “Simulation of Welding” by Mr. Dixit Mistry.

Day 6 (23/11/2019)



Session 1: Practical hand-on session by **Mr. Mahek Mistry** on “*Simulation of Welding*”

Session 2: An expert lecture on “*Modeling of Welding Process*” delivered by **Dr.Amit Arora** (IIT-GN)

Valedictory Function



Chief Guest **Prof. K.M.Bhavsar** (Chairman-ISTE, Gujarat Section), Guest of honor **Prof. Bhasker Bhatt** (SMC-ISTE, Gujarat Section) awarded certificate to Participants, Convener, Coordinator and Co-coordinator of FDP.

Total 26 participants are actively participated in this FDP. Out of that 15 participants are belongs to from other reputed institutes. This FDP is very fruitful to the participants and indirectly to the students. We received very much positive response from all the invited guests and participants.

Report Prepared By

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Report Submitted to

ISTE and GTU