

REPORT
on
GUJCOST SPONSORED & DST SUPPORTED
STATE LEVEL SEMINAR
‘ADVANCED TECHNOLOGIES
IN
THERMAL ENGINEERING’



ORGANISED BY
MECHANICAL ENGINEERING DEPARTMENT
DR. JIVRAJ MEHTA INSTITUTE OF TECHNOLOGY, MOGAR,
ANAND
Held on
22ND FEBRUARY 2019

Seminar Title : **ADVANCED TECHNOLOGIES IN THERMAL ENGINEERING**

- Organized By : Department of Mechanical Engineering
- Chief Patron : Shri. Narendra Shrimali
- Patron : Dr. Arvindkumar M. Jain
- Convener : Dr. Manish Mehta
- Coordinators : Prof. Darshan Gajdhar,
 - Prof. Avdhoot Jejurkar (DJMIT Coord.)
- Venue : Ramanujan Hall,
Dr. Jivraj Mehta Institute of Technology.
- Date : 22nd February 2019

AIM OF THE SEMINAR

- To introduce the Advanced Technologies in Thermal Engineering field.
- To bring the awareness and importance of thermal engineering through interaction with session experts of different fields.

ABOUT THE SEMINAR:

- The seminar focused on various aspects of advanced technologies in thermal engineering, including heat transfer and fluid flow wherein there are numerous applications in mechanical engineering such as in heat exchangers, renewable energy systems, refrigeration, energy conservation and thermal power plants.
- Seminar brought about the experts from different institutes to interact with the participants to give glimpses related to thermal engineering aspects.
- In the Seminar there was also discussion on heat exchangers as they are widely used in various industries and hence are of utmost importance in terms of understanding the problems associated and methodologies needed to overcome the same.
- Seminar also highlighted solar refrigeration as one of the field which has

tremendous potential in the application of solar energy for refrigeration.

- Various techniques were discussed to know the importance of demand to conserve conventional form of energy in power plants.

SCHEDULE OF ONE DAY SEMINAR

22ND FEBRUARY 2019, FRIDAY	
Time	Activity
9:30 am	Registration
10:00 am to 10:30 am	Inaugural Function
10:30 am to 11:00 am	Tea & Snacks
11:00 am to 12:15 pm	Expert Lecture on Energy conservation in Power Plant by Dr. R. N. Patel , Additional Director, Institute of Technology, Nirma University, Ahmedabad
12:15 to 1:15 pm	Lunch
1:15 pm to 2:30 pm	Expert Lecture on Advanced technology in Solar Refrigeration by Dr. Hitesh Bhargav , Assistant Professor, BVM Engineering college, Vallabh Vidhyanagar
2:30 pm to 2:45 pm	Hi-Tea
2:45 pm to 4:00 pm	Expert Lecture on Advanced Technology in Heat Exchanger by Dr. P. V. Ramana , Dean, R & D, Sardar Vallabhai Patel Institute of Technology (SVIT), Vasad
4:00 pm to 4:30 pm	Valedictory Function

REGISTRATION:

The registration began from 9:00 a.m. onwards. The total of 60 participants registered for the seminar including UG students, PG students and Faculty members. Spot registration was allowed for participants.

All registered participants received the Kit which included the seminar brochure.

INAUGURATION FUNCTION:



Inaugural Function

The inauguration session began with welcome to the dignitaries on the dais. Prof. Mahesh Chavda of Mechanical Department, DJMIT welcomed the dignitaries on the dais and off the dais. Also he welcomed all the faculties and participants. As an auspicious beginning, prayer was sung along with the lighting of lamp done by all the dignitaries. After that, floral welcome to all the dignitaries was done.

The dignitaries on dais included Shri Narendra Shrimali, Honourable Chairman of CENT-DJMIT, Shri. Sanjay Shrimali, Director, DJMIT, Dr. Arvindkumar Jain, Principal, DJMIT, Dr. R N Patel, Expert from Mechanical Department and Dr. Manish Mehta, Head, Mechanical Department, DJMIT. Dignitaries on the dais addressed the Inaugural session with their views and opinions.

WELCOME SPEECH:

Welcome speech was given by Dr. Manish Mehta, Head, Mechanical Engineering Dept., DJMIT. He briefed about the very purpose of organizing the event and welcomed all the dignitaries. He wished all success to the department for conducting seminars. Dignitaries were presented mementoes as a token and memory of the Seminar from the college.

SESSION-1:

ENERGY CONSERVATION IN POWER PLANT BY DR. R N PATEL,

Additional Director, Institute of Technology, Nirma University, Ahmedabad



Dr. R.N. Patel delivering expert talk

He emphasized the need of energy conservation in power plant. In order to reduce environmental pollution either energy consumption should be reduced or energy should be generated with higher conversion efficiency. He discussed about how to reduce power consumption by main auxiliary equipments like pumps and compressors in power plant. He discussed about various energy conservation method which should be adopted in power plant for getting maximum efficiency during operation.

SESSION-2:

ADVANCED TECHNOLOGY IN SOLAR REFRIGERATION - DR. HITESH BHARGAV, Assistant Professor, Mechanical Engineering Department, BVM Engineering College, Vallabh Vidhyanagar

He started his session by saying that near about 50 % of energy produced by various power plants is used in refrigeration and air-conditioning in the world.



Dr. Hitesh Bhargav delivering expert talk

So development of efficient renewable energy in refrigeration and air-conditioning is required. He discussed about various Advanced Technologies in Solar Refrigeration and explained solar adsorption refrigeration system in detail.

SESSION-3:

**ADVANCED TECHNOLOGY IN HEAT EXCHANGER BY DR. P V RAMANA,
Professor and Dean-R & D, SVIT, Vasad**

Heat exchanger is important equipment in power plant and process industry. He discussed about effect of porosity on heat transfer improvement in a heat exchanger. The porous medium in heat exchanger enhances the rate of heat transfer and reduces the pressure drop.



Dr. P. V. Ramana delivering expert talk

VALEDICTORY FUNCTION:

The session began with inviting dignitaries on the dais. After the brief speech by Principal, DJMIT who appreciated efforts of the team for successfully conducting the seminar, the certificates were distributed to participants.



Certificate distribution to participants during valedictory function

Memento was given to all Experts as a token of love and appreciation



Memento given to Experts as a token of love and appreciation

Vote of thanks was proposed by Prof. Mahesh Chavda, Assistant Professor, Mechanical Engineering Dept., DJMIT. On behalf of Mechanical Engineering Department, DJMIT, he thanked all Expert speakers for delivering expert talk. He thanked convener and coordinators and the DJMIT management for

organizing the seminar. He also thanked GUJCOST and DST for providing financial assistance for the seminar

FEEDBACK:

- Dignitaries present during One Day Seminar highly appreciated the efforts.
- Participants were much impressed by the organization of the Seminar and also appreciated the views shared by experts and session speakers during various sessions.
- Participants appreciated the ambiance of the campus, institute building, kit, and quality of presentation, schedule and arrangement as well as seminar hall.
- Dignitaries and Participants also appreciated food during the seminar.
- Question-Answer at the end of each session helped to solve the queries of participants and developed an urge to think more in this field.
- Participants were eager for such more sessions.