



SGT UNIVERSITY

SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY

(UGC Approved University)

GURGAON, Delhi-NCR

Faculty of Engineering & Technology

“Fundamentals of Solar Energy”

Type of event: Expert Talk

Date:10/11/2020

Time: 11:00A.M.-12:00 P.M.

Venue: Google Meet, Online mode

Organizer:Department of Mechanical Engineering, FEAT-SGT University.

Objective :The main objective of the webinar “Fundamentals of Solar Energy” is to promote research-oriented projects in this field.

About the Speaker/Guest:Dr. Amit Kumar, Assistant Professor, Department of Mechanical Engineering, NIT-Surat, Gujarat., having 7+ Years of teaching and research experience. He has a great research profile in this field and a number of research papers in SCI Journals.

Audience:47 students and faculty members from FEAT-SGT University.

Brief Report:

At SGT University, Faculty of Engineering and Technology, we organized a webinar on “Fundamentals of Solar Energy”. An expert talk was delivered on the importance of renewable energy resources especially solar energy by Dr. Amit

Kumar (Assistant Professor, Department of Mechanical Engineering, NIT-Surat, Gujarat) on 10th November 2020.

In the lecture the following points were discussed:

- Energy sources and Energy resources
- world-wide Consumption of the energy.
- Future Challenges for India as far as the energy is concerned.
- Power distribution in India.
- Need of solar energy.
- New targets for India in field of renewable energy resources.
- Latitude and Longitude angle of earth.
- Importance of angle of insolation on the earth.
- Solar angles in the different time periods.
- About solar energy collector.

Besides this, the solar instruments were also discussed. The instruments used for extraction and collection of solar energy in the form of electricity. The importance of the angles for solar plates in different time period of the day as well as the time period of a year. The position of different areas their time calculation with respect to the position and timing of sun have also been discussed.

The poster is for a webinar titled "Webinar on FUNDAMENTALS OF SOLAR ENERGY". It is organized by the Faculty of Engineering & Technology at SGT University. The organizers are Dr. Amit Kumar and Dr. Ajay. The speaker is Dr. Amit Kumar from NIT-Surat. The webinar is scheduled for 10 November 2020, from 11:00 am to 12:00 pm. The poster includes logos for SGT University and NIT-Surat, and a Google Meet link.

SGT UNIVERSITY
SHREE GURU GOVIND SACHA TRICENTENARY UNIVERSITY
(UGC & AICTE Approved) Gurugram, Delhi-NCR

**FACULTY OF
ENGINEERING & TECHNOLOGY**
Organises

**Webinar on
FUNDAMENTALS OF
SOLAR ENERGY**

Organizer
Dr. Amit Kumar
Associate Professor-FEAT

Organizer
Dr. Ajay
HoD, Mechanical Engineering
Associate Professor

Speaker
Dr. Amit Kumar
Assistant Professor-
NIT, Surat

Join with Google Meet:
<https://meet.google.com/sdt-qzfc-zqs>

10 November 2020
at 11:00 am to 12:00pm

Learning Outcome: It was very informative session on fundamental of solar energy. After attending this webinar, we understand the position of earth, sun and the importance of different angles to extract the maximum heat energy through the solar plates in the different time periods during a year and the different areas of our country as well.

Besides this, Solar will become a crucial component of India's energy portfolio in the coming decade. The Government of India is keen on using a renewable source of energy and is undertaking various measures to promote green energy. The government has implemented various policies and regulations to boost solar energy generation in the country as there has been increasing energy consumption due to rapid economic development and industrialization.

Shortcomings:(i) Less Audience

Webinar on

“Fundamentals of Solar Energy”

DATE 10/11/2020

Attendance Data

Timings 11:00A.M. - 12:00 P.M.

The screenshot shows a Google Meet interface during a webinar. The main window displays a presentation slide titled "New targets for Renewable" with the subtitle "Target for JNNSM – 22,000 MW up to 2022 (SPV & CSP)". The slide contains a table titled "Increased Targets for Renewable Power" with two columns: "Sources" and "Capacity (in MW)". The table lists Solar (1,00,000), Wind (60,000), Biomass (10,000), and Small hydro (5,000), with a total capacity of 1,75,000 MW. A source note at the bottom of the table reads "Source: Finance Minister's speech in Parliament on February 28, 2015". On the right side of the screen, a sidebar shows the "Meeting details" for a session with 47 people. The participant list includes Amit Kumar (You), Abhay Anand, Abhishek Sharma, Aditya Solanki, aditya verma, Amit Kumar, amit ror (Presentation), and amit ror. The bottom of the screen shows the Windows taskbar with the search bar and various application icons.

Sources	Capacity (in MW)
Solar	1,00,000
Wind	60,000
Biomass	10,000
Small hydro	5,000
Total	1,75,000

Source: Finance Minister's speech in Parliament on February 28, 2015

Sr. No.	Name of Student
1	Amit kumar
2	Abhay Anand
3	Aditya
4	Amit Mor
5	TARUN KUMAR
6	HIMANSHU
7	KUNAL KAUSHIK
8	HIMANSHU
9	NAVEEN KUMAR DARIA
10	HIMANSHU MALIK
11	TANUSHREE MOHANTY
12	SARTHAK
13	DRISHTI
14	VARUN SINGH
15	ATUL
16	VIDHI SHARMA
17	SIDDHANT SHARMA
18	NISHANT KUMAR
19	ZINSHU KUMAR
20	TUSHAR SHARMA
21	NITESH KUMAR
22	MANU
23	VARUN SHARMA
24	MOHIT KUMAR
25	YATIN ARORA
26	ADITYA SHRIVASTAV
27	GAURAV KUMAR
28	KARAN SINGH SAMBYAL
29	AMAN JANGRA
30	VANSH GURAWALIA
31	AMAN YADAV
32	ABHISHEK SANGWAN
33	SAKSHI
34	ROHIN VENGATESH
35	KOSHISH
36	NITIN SINGH
37	SAGAR DABAS
38	SAKET KUMAR

39	PRIYANSHU
40	MEHAK GAUR
41	NIKHIL SHARMA
42	ATUL
43	NITIN
44	ADITYA JAIN
45	SAKSHI KADIAN
46	BHAVIK DHAMIJA
47	ALOK KESHRI

Reem