

FIELD TRIP
SHALIVAHANA GREEN ENERGY LTD., 6 M. W. BIO-MASS

Name of the organizer: Department of Chemistry,

GDC-BELLAMPALLY

Name of the Field Trip : Shalivahana Green Energy Ltd., 6
M.W. Bio-Mass

No. of students involved : 25

No. of teachers involved : 02

Date of the visit : 27-03-2021.

Place of the visit: Shalivahana Green Energy Ltd.,
Patha Mancherial.

OBJECTIVES OF THE FIELD TRIP:

The Main Objective of the field trip is to develop the knowledge, skill and character among the students. The field trips are a great way to bring excitement and adventure to learning. Especially the activity of educational field trips which are commonly conducted for the students at higher level are one of the major source of providing knowledge to the students by giving opportunity for knowledge for self-experiences and observations and self-long-lasting learning's.

Fuels used to Generate Power:

1. Husk
2. Forestry Crops and Residues
3. Agricultural Crops and Residues
4. Sewage
5. Animal Residue

Production of Power by Plant: 6 M. W. Per Hour.

Rotation of Turbine : 7500 RPM.

Expenditure incurred & resources required: NIL

Problems encounter: NIL

Name of the resource person: Mr. Pradeep Kumar Manager
MR.SUDHAKAR PLANT OPERATOR

OUTCOME OF THE VISIT (OR) STUDENTS GAINED KNOWLEDGE ABOUT
By visiting Shalvanahana

Green Energy Limited, our students gained knowledge about, Bio-power technologies convert renewable biomass fuels into heat and electricity using processes similar to those used with fossil fuels.

Most electricity generated from biomass is produced by direct combustion. Biomass is burned in a boiler to produce to high pressure steam. The rotation of the turbine 7500 rpm, drives a generator, producing electricity. Biomass can also serve as substitute for portion of Coal in an exciting power plant furnace in process called co-firing. By this student understood that the how biomass can be utilized to produce power from the waste or residual organic materials .



DEPARTMENT OF CHEMISTRY, GDC BELLAMPALLY



DEPARTMENT OF CHEMISTRY, GDC BELLAMPALLY



DEPARTMENT OF CHEMISTRY, GDC BELLAMPALLY

LIST OF STUDENTS PARTICIPATED IN FIELD TRIP

S.No	NAME OF THE STUDENT	GROUP	SIGNATURE
01	B. Shirisha	BZC III Year	B. Shirisha
02	D. Meghana	BZC III Year	D. Meghana
03	G. Gamyra	BZC III year	G. Gamyra
04	P. Manasa	BZC III year	P. Manasa
05	B. Sandhya Rani	BZC III year T/M	B. Sandhyara
06	D. Pravalika	BZC III year T/M	D. Pravalika
07	E. Maheshwari	BZC III year T/M	E. Maheshwari
08	P. Anjamma	BZC III year T/M	P. Anjamma
09	G. Nirikshana	BZCS II year T/M	G. Nirikshan
10	N. Lavanya	BZC II year T/M	N. Lavanya
11	N. Spandhana	BZCS II year T/M	N. Spandhan
12	B. Shireesha	BZC I year E/M	B. Shireesha
13	G. Anudeepthi	BZC I year E/M	G. Anudeepthi
14	J. Saisathya	"	J. Saisathya
15	M. Mounika	"	M. Mounika
16	K. Nagalaxmi	"	K. Nagalaxmi
17	J. Vidhyadhari	"	J. Vidhyadhari
18	K. Sai Keerthana	"	K. Sai Keerthi
19	S. Vyshnavi	"	S. Vyshnavi
20	N. Aishwarya	"	N. Aishwari
21	P. Akshaya	"	P. Akshaya
22	D. Sriveni	"	D. Sriveni
23	D. Abhilash	BZC II year E/M	D. Abhilash
24	M. Ravinder	BZC I year E/M	P. Ravinder

Production of power by plant: 6.W.M

Rotation of Turbine : 7500 rpm

Problems encountered : Nil

Name of the Resource Person : Mr. Pradeep Kumar, Manager

Outcome of the Visit

- Exposure to outside world of technology and power-generation
- Experiential knowledge of conversion of renewable biomass fuels to heat and electricity
- Understanding the conversion process of fossil fuels
- Process of direct combustion
- Practical knowledge about turbines, power generation etc.,
- To realize how biomass can serve as a substitute for coal in generating power through process called 'Co-firing'

Conclusion

The field trip provided students an insight into how biomass can be utilized for power generation from waste organic materials by recycling.


P. Swamy

Lecturer in Chemistry

G. D.C. Bellampally


PRINCIPAL
Govt. Degree College
Bellampally-504 25
Dist: Mancherial (T.S.)

