

**S.V.L.N.S GOVERNMENT DEGREE COLLEGE,  
BHEEMUNIPATNAM  
DEPARTEMNT OF PHYSICS**

**Subject: Field Trip Report - Visit to Perla Renewable energy and SPV  
1MW Solar Grid-Connected Plant at Simhachalam, Visakhapatnam**

To  
The Principal  
S.V.L.N.S Government Degree College  
Bheemunipatanam

I am pleased to present a report on the field trip to Perla Renewable Energy, CBM compound, Visakhapatnam and SPV 1MW Solar Grid-Connected Plant at Simhachalam, organized for the students of III B.Sc (MPC) on 23/08/2017. The purpose of the trip was to provide the students with practical exposure to renewable energy generation and familiarize them with the functioning of a solar power plant.

**1. Objective:**

The primary objective of the field trip was to enhance the students' understanding of solar energy and its application in real-world scenarios. By visiting the Perla Renewable Energy, CBM compound, Visakhapatnam and SPV 1MW Solar Grid-Connected Plant at Simhachalam, the students could observe the plant's infrastructure, gain insights into its operations, and comprehend the benefits and challenges associated with solar power generation.

**2. Participants:**

A total of 12 students from III B.Sc MPC accompanied by M.Rajeswara Rao, lecturer in charge Department of physics participated in the field trip. The students were selected from the department of physics and demonstrated an interest in sustainable energy solutions.

1. V.Sai Mounika
2. M.Rupadevi
- 3.U.Sireesha
4. G.Dhanaraju
- 5.N.V.Raviprasad
- 6.K.Ramana
- 7.U.Mohanarao
- 8.B.J Srivardhan Reddy
9. P.Lakshmanarao
- 10.B.Somaraju
- 11.Y.Naveen
- 12.G.Vamsi Krishna

### **3. Itinerary:**

The field trip was scheduled to begin at 9.30AM on 23/08/2017. The following is a summary of the itinerary:

9.30AM: Arrival at Perla Renewable energy at CBM Compound

9.45AM to 12 Noon: Demonstration of Solar PV modules working, Solar Water Heaters Working, Types of different panels and their efficiency and importance of renewable energy by GM, Sri. Chandrashekar Perla Renewable energy

12 Noon- 1.15PM: Arrival at Nakshtavanam Simhachalam and Lunch

1.30 PM: Arrived at SPV 1MW grid connected solar power plant, Simhachalam

1.45- 3.30: Demonstration of construction and working of the plant, its maintenance by Technician Sri. Appalaraju, SPV 1MW Solar Power Plant

3.30 to 4PM: Q and A session

4PM: Return journey to SVLNS Degree College from Simhachalam to Bheemunipatnam

### **4. Highlights of the Field Trip:**

The field trip to Perla Renewable energy, CBM Compound and the SPV 1MW Solar Grid-Connected Plant at Simhachalam provided an excellent opportunity for the students to engage in hands-on learning. The highlights of the trip were as follows:

#### **a. Infrastructure and Operations:**

The students were able to witness the solar plant's infrastructure, including the solar panels, inverters, and monitoring systems. They observed how the plant efficiently converts sunlight into electricity and witnessed the process of power transmission and distribution.

#### **b. Knowledge Sharing:**

The plant's engineers and technicians provided comprehensive explanations about the functioning of the solar power plant. They discussed the technical aspects, maintenance procedures, and safety measures associated with the plant's operations. The students actively participated in a Q&A session, clarifying their doubts, and gaining valuable insights.

#### **c. Interactive Sessions:**

During the interactive session with GM Perla Renewable energy and Technician at SPV 1MW solar plant, experts emphasized the importance of solar energy in the context of renewable resources and sustainable development. The students learned about the environmental benefits of solar power, such as reduced carbon emissions and energy independence. They also explored the potential career opportunities in the renewable energy sector.

### **5. Learnings and Outcomes:**

The field trip had several positive outcomes and learnings for the students, including:

#### **a. Practical Understanding:**

The students developed a practical understanding of solar energy generation by witnessing a functioning solar power plant. They gained insights into the various components involved in solar power generation, including the importance of solar panels, inverters, and power distribution systems.

**b. Environmental Awareness:**

Through the trip, the students became more aware of the environmental benefits of solar energy. They learned about the role of solar power in reducing greenhouse gas emissions, mitigating climate change, and promoting sustainable development.

**c. Career Exploration:**

The interactive sessions enabled the students to explore potential career opportunities in the renewable energy sector. They gained an understanding of the skills and knowledge required to work in the field of solar energy and were inspired to consider it as a viable career path.

A handwritten signature in black ink, appearing to read "Majid", written over a horizontal line.A handwritten signature in black ink, appearing to read "T. C. ...", written over a horizontal line.

Signature of the principal

PRINCIPAL  
VLSNS GOVERNMENT DEGREE COLLEGE  
BHEEMUNIPATNAM

S.V.L.N.S GOVERNMENT DEGREE COLLEGE, BHEEMUNIPATNAM  
Dr.T.GLORY DAYA KUMARI,M.A,Ph.D.

Date:22/08/2017

PRINCIPAL

To

The General Manager,  
Perla Renewable Energy,  
CBM compound,  
Visakhapatnam.

Sub: Request for permission to field visit-Regarding  
Sir,

I would like to inform you that it is proposed to visit your office by our students of final year B.SC (MPC) as a part of curriculum and practical experience which is very useful to them. I request you to kindly accord permission to the under mentioned 12 students for visit to your office. The proposed date of visit is 23/08/2017.

M.Rajeswar Rao, lecturer in physics will follow the students.

It is certified that all 12 students have attained the age of 18 years.

M.Rajeswara Rao (Lecturer in Physics) Mobile Number 9441464109

1. V.Sai Mounika
2. M.Rupadevi
- 3.U.Sireesha
4. G.Dhanaraju
- 5.N.V.Raviprasad
- 6.K.Ramana
- 7.U.Mohanarao
- 8.B.J Srivardhan Reddy
9. P.Lakshmanarao
- 10.B.Somaraju
- 11.Y.Naveen
- 12.G.Vamsi Krishna

Thanking you sir

Yours Faithfully



Signature of the principal

PRINCIPAL  
S.V.L.N.S GOVERNMENT DEGREE COLLEGE  
BHEEMUNIPATNAM

S.V.L.N.S GOVERNMENT DEGREE COLLEGE, BHEEMUNIPATNAM  
Dr.T.GLORY DAYA KUMARI,M.A,Ph.D.

Date:22/08/2017

PRINCIPAL

To

The General Manager,  
SPV 1MW Solar Power Plant  
Simhachalam  
Visakhapatnam.

Sub: Request for permission to field visit-Regarding

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Yours Faithfully



Signature of the principal

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S.V.L.N.S GOVERNMENT DEGREE COLLEGE  
BHEEMUNIPATNAM



Permission to visit your office > Inbox x



**mankala rajeswara rao**

Tue, Aug 22, 2017, 1:21 PM



Sir I would like to inform you that myself and 12 students of BSC are visiting your office on 23/08/2017 at 12 noon as a part of field visit Thanking you Rajeswara



**chandra@perlasolar.in** via my.com

Tue, Aug 22, 2017, 1:24 PM



to me ▾

Ok sir. We will be looking forward.

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Sent from myMail for Android

Tuesday, 22 August 2017, 01:21PM +05:30 from mankala rajeswara rao [rajumankala@gmail.com](mailto:rajumankala@gmail.com):



Sir

I would like to inform you that myself and 12 students of BSC are visiting your office on 23/08/2017 at 12 noon as a part of field visit

Thanking you

Rajeswararao



**GM of PERLA Solar Sri. Chandrashekar Explaining the Construction and working of PV modules**



**Demonstration of Solar Water heater construction and working**





**Demonstration of Renewable energy production and consumption worldwide statistics**



**Lunch at Nakshtravanam at Simhachalam**



**Demonstration of Online monitoring system of SPV 1MW Solar power plant at Simhachalam**



**SPV 1MW Solar Power plant at Simhachalam**



**SPV 1MW Solar Power plant at Simhachalam**



**Demonstration of working of Solar power plant by Sri Appalaraju Technician at SPV Solar powerplant**

*Majid*

*T. Anand*

**Signature of the principal**  
PRINCIPAL  
SVLNS GOVERNMENT DEGREE COLLEGE  
BHEEMUNIPATNAM