Pune Vidyarthi Griha's
College of Engineering Technology and Management,
Parvati, Pune – 411009

Department of Engineering Science & Humanities

A REPORT ON

Educational Visit

- **A.Y.:** 2025–26; **SEM – 2**
- **Date:** 27-02-2026
- **Day:** Friday
- **Venue:** High Energy Materials Research Laboratory, Pune
- **Organization:** Defense Research and Development Organization (DRDO)(HEMRL)
- **Time:** 2:00 PM – 4:30 PM
- **Attendees:** F.Y.B. Tech Students and Faculty Members
- **Total Students:** 19

Introduction:

Industrial visits are an essential part of engineering education because they provide practical exposure to students. On **27 February 2026**, the students of **First Year B. Tech** visited the **High Energy Materials Research Laboratory (HEMRL)**, Pune.

The laboratory operates under the **Defense Research and Development Organisation (DRDO)** and is one of India's leading research centers working in

the field of **high energy materials, explosives, propellants, and advanced defense technologies**.

The visit aimed to help students understand how scientific research is applied in real defense systems and how laboratories maintain safety while working with sensitive materials.

Agenda of the Visit:

The visit was organized to give students exposure to research laboratories working in defense technology. The following agenda was followed during the visit:

• Arrival and security verification at the laboratory entrance
• Welcome address by the laboratory officials
• Introduction to the **Defense Research and Development Organisation** and its role in national defense
• Presentation about the work carried out at **High Energy Materials Research Laboratory**
• Demonstration of research facilities and laboratories
• Explanation of safety protocols used in defense laboratories
• Interaction session with scientists and researchers
• Question and answer session
• Closing remarks and vote of thanks

This structured agenda helped students gain knowledge about research activities carried out in defense laboratories.

Observations:

During the visit, students observed several important aspects of defense research laboratories.

First, strict **security procedures** were followed before entering the premises. Identification verification and safety instructions were given to all visitors.

Students were introduced to different **research facilities and laboratories** where scientists work on the development and testing of energetic materials.

The officials explained the importance of **precision, safety, and scientific accuracy** while working with explosive and high energy materials.

Students also learned about the **testing procedures and safety mechanisms** used to ensure that the materials developed are reliable and stable for defense use.

The interaction with scientists gave students an opportunity to understand the challenges involved in defense research and the dedication required to work in such laboratories.

Learning Outcomes:

The industrial visit provided valuable learning experiences for students.

Students gained knowledge about the functioning of national defense research laboratories. They understood how theoretical concepts learned in classrooms are applied in real research environments.

The visit helped students learn about:

- The importance of research and innovation in defense technology
- Safety protocols used in laboratories dealing with hazardous materials
- The role of scientists and engineers in national security
- Real-world applications of physics, chemistry, and engineering principles

The interaction with professionals motivated students to explore opportunities in research and development.

Conclusion:

The industrial visit to **High Energy Materials Research Laboratory**, a laboratory under the **Defense Research and Development Organisation**, was an informative and educational experience for the students.

The visit helped bridge the gap between theoretical knowledge and practical application. Students gained insights into advanced research activities carried out in defense laboratories and understood the importance of safety, innovation, and scientific discipline.

Such industrial visits play a vital role in enhancing students' understanding of engineering and science in real-world environments.

Overall, the visit was highly beneficial and inspired students to pursue research and technological development in the future.

Photographs: