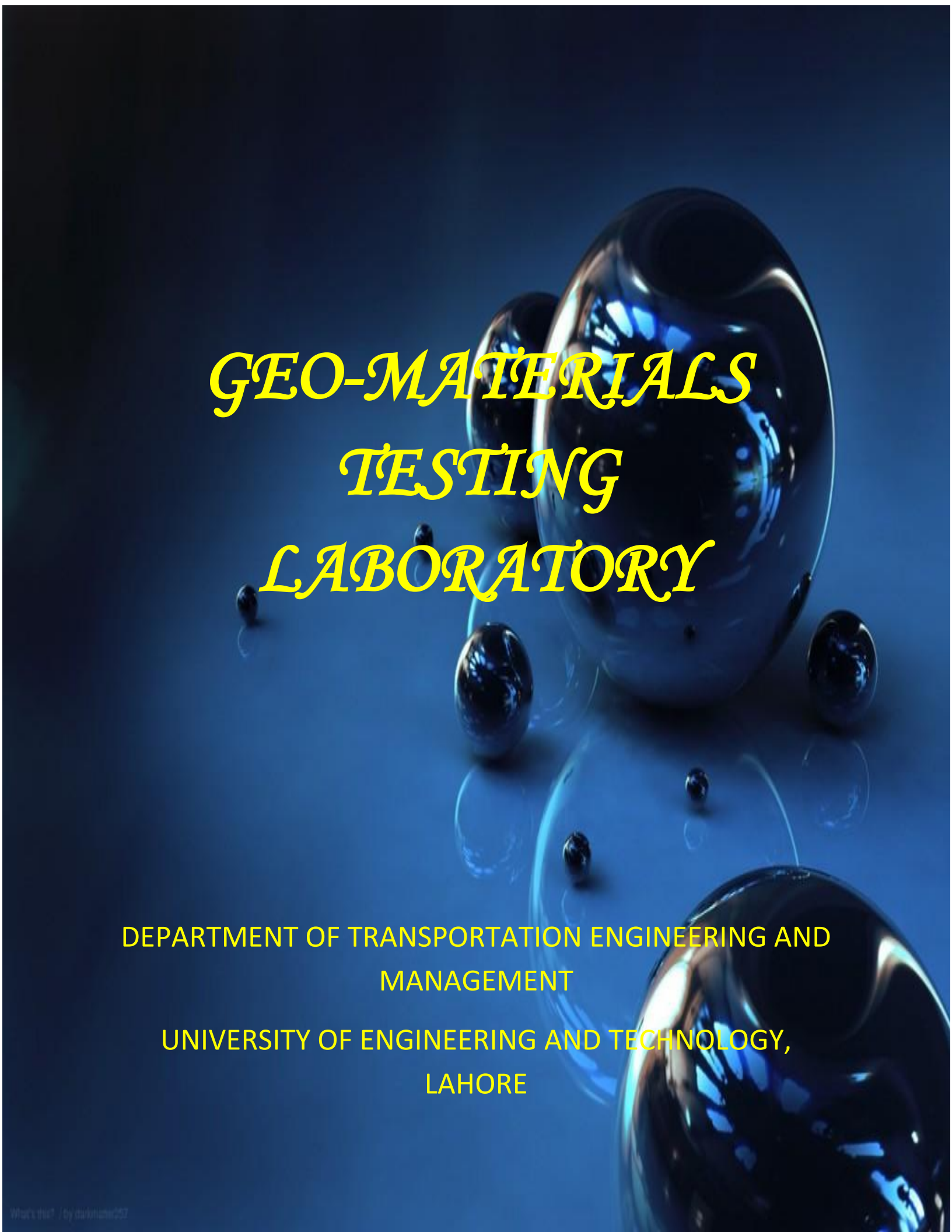

# GEO-MATERIALS TESTING LABORATORY

DEPARTMENT OF TRANSPORTATION ENGINEERING AND MANAGEMENT

UNIVERSITY OF ENGINEERING AND TECHNOLOGY, LAHORE

## *Venue*

Department of Transportation Engineering and Management, ground floor

## *Introduction*

This laboratory came into existence with the establishment of the Department of Transportation Engineering and Management (DTEM) in February, 2006. Right from its date of establishment, this lab is providing the necessary facilities to the students for their partial fulfillment of Bachelors degree in Transportation Engineering. The lab also houses a classroom where the lecturer can brief the experiments prior to their performance. Moreover commercial testing is also done in this lab.

## *Director*

Engr. M. Awais Shafique
awaisshafique@uet.edu.pk

## *Staff*

| | |
|---|---|
| Munsif Ali | Lecture Assistant |
| Tayyab Majeed | Lab. Technician |
| Muhammad Ayub | Lab. Assistant |
| M. Nasir Pervaiz | Lab. Assistant |

# *List of equipments*

1. In place density determination apparatus
2. Small sieve shaker with sieves
3. Large sieve shaker with sieves
4. Hydrometer analysis apparatus
5. Atterberg limits testing apparatus
6. Standard penetration test apparatus
7. Data acquisition system
8. Digital weighing balance
9. Oedometer apparatus
10. Direct shear apparatus
11. CBR test apparatus
12. Unconfined compression apparatus
13. Automatic compactor
14. Manual compaction apparatus
15. Los Angeles abrasion test apparatus
16. Specific gravity test apparatus
17. Small oven
18. Large oven


## *List of experiments*

### Geotechnical Engineering I

1. Determination of moisture content by oven drying method and speedy moisture meter.
2. Determination of Atterberg limits.
3. Grain size analysis by sieve analysis and hydrometer analysis.
4. Determination of Specific Gravity.
5. In-situ density determination by core cutter method and sand replacement method.
6. Determination of compaction by Proctor test.
7. Determination of consolidation.
8. Determination of permeability by constant and variable head methods.

### Geotechnical Engineering II

1. Grain size analysis.
2. Comparison between different compaction techniques.
3. Determination of consolidation of specimen by varying clay content.
4. Direct shear test.
5. Unconfined compressive strength of cohesive soil.
6. Triaxial compression test.
7. Standard penetration test.

# *Lab at a glance*