

EGE 5192. Lab 2: Sedimentology and Paleontology (3 credits)

Unit- 1

Sieve analysis, plotting and interpretation of data (Trask method & Folk and Ward method). Estimation of statistical parameters - mean, skewness, kurtosis and standard deviation (sorting). Pipette analysis and estimation of clay content. Plotting of gravel-sand-mud and sand-silt-clay data in triangular coordinate sheets.

Unit- 2

Study and description of hand specimens and thin sections of conglomerate, breccia, sandstone, limestone, mudstone and shale.

Separation of heavy and light minerals from sediments. Preparation of grain mounts and mineral identification

Unit- 3

Sample processing techniques and separation of microfossils from matrix and marine sediments.

Identification of the following types of microfossils (calcareous and siliceous):

Planktonic foraminifera, Benthic foraminifera, Ostracods, Pteropods and Radiolaria.

Identification and separation of important species of planktonic foraminifera.

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