Internal Structure of The Earth

The Earth's Crust

1. The outermost solid cover or shell of the earth is known as the earth's crust.

2. The thickness of the crust is about 30 km.

3. It is thicker in the region of the continents and thinner in the region of the ocean floors.

4. The density of the rocks in the earth's crust ranges from 2.7 to 3 g/c.c (grams per cubic centimeter).

5. The upper part of the crust consists of silica and aluminium in greater proportions. That is why, it is called 'Sial'.

6. Whereas the lower part of the crust is called 'Sima' because the proportion of silica and magnesium is higher in this part.

Mantle

1. This layer lies below the crust.

2. Its thickness is about 2900 km and the density of substances in the mantle ranges from 3.0 to 4.7.

Core

1. The earth's core lies below the mantle. Its thickness may be about 3471 km.

2. Its radius is 6371 km., according to IUGG.

3. It is divided into two parts — the outer core and the inner core. The outer core is probably in a liquid state and the inner core in a solid state.

4. The core mainly consists of iron with some amount of nickel and sulphur (NIFE).

5. After the mantle, the earth's density goes on increasing rapidly towards its centre and finally is more than 13.

6. The temperature of the central part of the earth may be about 5000° C. >- The study of the earth's interior helps us to understand the original rocks in the earth's crust and their later transformation.