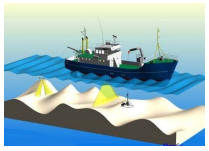
In the geological vocabulary, the term "sedimentology" is relatively recent (1932). Today it's most usually in the direction of study sedimentary phenomena and their products, the sediments.

The sedimentology is often attached to the rocks description, or sedimentary petrography,although it constitutes logically, with the processes diagenetic study, a chapter of petrology.



With the example of volcanology, pedology and other geodynamics disciplines, the sedimentology studies "current phenomena" still proceeding under our eyes, on the continents surface, the sea-bed and their border.It concerns essentially the alteration and the disintegration by biological and meteoric agents of sedimentary and crystalline rocks, the removal, transport and the deposit by water, the ice, the wind, of materials released, their transformation into sedimentary rocks being only possible. In addition to a powerful action the relief, morphogenic system, sedimentary phenomena have for main effect the sorting of their products, which different according to the mediums and conditions erosion and sedimentation that those imposed.

The variety of the continental environments (fluviatile, desert, refrigerators and periglacial, lake) are especially related to the climatic conditions but it is especially related, on the one hand, with the hydrosphere and all the associated phenomena (wave, current, etc.), in addition, with the oceanic relief (littoral, and abyssal hills, pits, dorsals). For example the nature and the thickness of the products on the continental shelf are very variable, caused by the the diversity of the

transports agents, the proximity of the materials sources and the depth too.

How can we pass from the current phenomena to the old phenomena?

Which can the sedimentology contribution bring in this activity?

The fundamental principle of geology, and more particularly of geology historical, is according to which "the present is the key of the past".

If the physics and chemistry laws are unchangeable, the climatic conditions changed much during geological times.Even so, the current cause principle resides the basis of all investigation in sedimentary geology.

The meticulous study of the sedimentary rocks, their horizontal and vertical distribution, their abundance, the whole of their lithological and paleontological natures, and their comparison with the current sediments, makes it possible to recall the history of a basin and adjacent continent, it provides a "film" of the events. We can, for example, find the speed sedimentation (and thus erosion), the sediment origins , the conditions under which they settled.