

## **Luminescence dating in geology and archeology**

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Luminescence dating is a technique by which the timing of the last exposure to light or heat of minerals in sand or silt (principally quartz and to a lesser extent feldspar, zircon) can be determined. The technique is now widely used as a chronological tool in geological and archaeological studies. Luminescence dating makes it possible to obtain chronological information from deposits that could not be dated previously. It is the only method to obtain absolute ages for deposits from the complete last glacial cycle, thereby opening a wide range of new possibilities to be explored by geologists.

All expertise on luminescence dating and related research present in The Netherlands is brought together in NCL, Netherlands Centre for Luminescence dating, in order to create a centre of excellence that combines all scientific aspects of luminescence dating: i.e. fundamental scientific research, applications and the scientific aspects of users.

An overview of the method will be presented, including some recent research results.