

## **Advances in isotopic Geochronology**



## **The first case study of $^{230}\text{Th}/\text{U}$ -dating of buried wood remnants from Siberia**

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A radiochronological study of buried wood remnants was carried out to check the capabilities and limitations of the  $^{230}\text{Th}/\text{U}$ -method for their dating. The object of study was larch stump from the reference Lipovka section located on the Tobol River bank (SW Western Siberia,  $57^{\circ}55'$  N). A buried soil occurs in the middle part of the sequence where a stump layer was found. Numerous larch stumps occur in life position; therefore, redeposition of wood remnants is excluded. It was found the kernel can be a layer of close-to-geochemical system suitable for the  $^{230}\text{Th}/\text{U}$ -dating method. The  $^{14}\text{C}$  age 36400-37930 cal BP obtained earlier for the same larch stump are comparable with the confidence interval of the  $^{230}\text{Th}/\text{U}$  dates  $39.1\pm 5.7$  and  $40.3\pm 3.9$  kyr calculated for the larch kernel.

**Keywords:**  $^{230}\text{Th}/\text{U}$  dating method, wood remnants, Upper Pleistocene, Western Siberia.