

# MILUTIN MILANKOVIĆ

Milutin Milanković was a Serbian mathematician, astronomer, climatologist, geophysicist, civil engineer, full professor of celestial mechanics at the University of Belgrade and promoter of science. He was the first Serbian doctor of technical sciences and the most cited Serbian scientist of all times.

He was a pioneer in rocket engineering, vice-president of the Serbian Academy of Sciences and Arts (SANU) through three mandates, director of the Astronomical Observatory in Belgrade, member and re-founder of the Commission 7 for celestial mechanics of the International Astronomical Union, etc.

He was born in Dalj, on 28 May 1879, and died in Belgrade on 12 December 1958.

Milanković gave two fundamental contributions to science. The first contribution is the "Canon of the Earth's Insolation" which characterizes all the planets of the Solar system. The second contribution is the explanation of the Earth's long-term climate changes caused by astronomical changes in the position of the Earth in relation to the Sun, now known as Milankovitch cycles. This explained the ice ages occurring in the geological past of the Earth, as well as the climate changes on the Earth which can be expected in the future.

He founded planetary climatology by calculating temperatures of the upper layers of the Earth's atmosphere as well as the temperature conditions on planets of the inner Solar system (Mercury, Venus and Mars), and the Earth's own satellite, the Moon. In geophysics, Milanković is considered the co-author of the theory of tectonic plates, with his work on secular variations of the Earth's rotational poles.

Milanković was the author and co-author of eight patents, which he submitted in various countries during the period between 1905 and 1933. In his university career, he remained faithful to his first calling, civil engineering, thus working as a constructor, structural analyst and supervisor on a number of reinforced concrete constructions across Yugoslavia. Most of his patents are related to this field.

Milutin Milanković proposed the reform of the Julian calendar and made the most accurate calendar to date. The length of a tropical year is 365 days, 5 hours, 48 minutes and 46 seconds, while Milanković achieved the accuracy of 365 days, 5 hours, 48 minutes and 48 seconds. He also proved that Mars could not support civilized life, because his calculations showed that the temperatures on Mars were too low to support life in such a form.