Nuclear-active cosmic rays (CR) near the Earth are flow of stable particles. Until recently, it was thought that only nuclei were such particles. In the high-altitude HADRON experiment (FIAN, Tien Shan), it was shown that particles of non-nuclear nature are present in the CR at energies of \( \sim 10 \) PeV. Stable particles other than nuclei can only be hypothetical particles of strange quark matter-strangelets. The discovery of strangelets suggests a number of fundamental consequences: the basic state of matter in the nature is strange quark matter (SQM); all nuclei are unstable, but with lifetimes longer than the lifetime of the Universe; there must be sources of strangelets-Witten predicted strange quark stars; deconfinement quarks in the SQM is a direct proof of the quark existence; all CR can have a Galactic origin; transition of nuclei to the SQM state is an exothermic process.