The first mention of cosmic dust in the scientific literature related to the sixties of the XIX century when the famous polar explorer Nordenskiöld (A.E. Nordenskjold) found on the ice surface a powdery substance, and suggested that it has a cosmic origin.
In the 1870s, according to the results of the "Challenger" expedition, the in deep-sea sediments of the Pacific Ocean there were discovered rounded magnetite particles (magnetic spherules), first described by I. Murray, in respect of which it was suggested that they are of the cosmic origin.
• Around the same years, information about cosmic dust have been published in a document known as «The Mahatma Letters»
They contained correspondence of two Mahatma (Mahatma K.H. (Mahatma Kuthumi) and Mahatma M.) to A.P. Sinnett, editor of the influential English-language newspaper "Pioneer", published in India, and to A.O. Hume, the famous ornithologist and a senior official Anglo-Indian administration.
The Mahatma Letters (Mahatma K.H. and Mahatma M.) were stored in the archives of A.P. Sinnett and were first published in 1923 “The Mahatma Letters to A.P. Sinnett”. London, 1923.

Since 1939, the originals of letters are stored in the library of the British Museum in London.
The letter, which reported data on cosmic dust, was written by Mahatma K.H. and obtained by A.P. Sinnett at Simla in October, 1882. It contained remarkable information about the cosmic dust
Meteoric dust over the Earth

K.H. reported that high above the surface of the Earth "air is saturated and space is filled with magnetic or meteoric dust ..." [1, p. 201]. In this connection it is interesting to note that studies of the twilight glow of the atmosphere, carried out in the 30-50’s of the XXth century, have shown that at altitudes below 100 km twilight glow is determined by scattering of sunlight in the gas (air) medium, whereas at an altitude of more than 100 km the predominant role plays scattering by dust. The first observations using artificial satellites led to the discovery of a dust shell around the Earth at an altitude of several hundred kilometers.
Cosmic dust in snow cover and deep-water sediments

Indication of K.H. on the presence of micro-meteorites in the form of magnetic particles in the snow cover and in the deep-water sediments is remarkable: "... Snow, especially in our northern regions, is full of meteoric iron and magnetic particles, and deposits of the latter are found even on the bottom of the seas and oceans ..." [1, p. 201]. At present investigation of micrometeorites is an important means of studying the cosmic matter on Earth. These particles are found in glacial deposits (in the Arctic, Antarctic, high in the mountains, mountain peaks) and in the deep-water silt (mud) in the form of dense spherical particles with magnetic properties
Mahatma gave a very interesting answer to Sinnett about measuring distances to stars using the “photometric index”. He draws attention to the fact that "powerful cluster of meteoric material" in the interstellar space leads to a distortion of the observed intensity of star light and thus to a distortion of the distances to stars obtained by the photometric measurements” [1, p. 207]. In essence, this was an indication of the presence of interstellar absorption discovered in 1930 by Trempler, which is considered one of the most important astronomical discoveries of the XXth century.
Ice ages and warming periods caused by meteoric dust

There is a noteworthy remark by K.H. that the ice ages, as well as warming periods such as "Carboniferous age" are caused not by change in solar radiation, but by meteoric dust. It is known now that the solar constant virtually is unchanged for billions of years; at the same time, the role of dust in the climate change is quite possible and reasonable. The question is in the cause of intense dustiness of atmosphere
Effect on precipitation

Much attention is paid to the effect of meteoric dust on precipitation. In 1879, Cooper Rayyard proposed a theory about the effect of meteoric dust on the weather, but at that time this idea was rejected. In 1956, Bowen (E.G. Bowen) has suggested that particles of meteoric dust may play a role of condensation nuclei and cause precipitation. He compared the statistical data on rainfalls from 300 meteorological stations of the northern and southern hemispheres with meteor showers. It turned out that there was a correlation between them. Moreover, the precipitation peak was shifted relative the meteor shower peak for 30 days. Later these findings about effect of meteoric dust on precipitation were confirmed by other authors. However, some astronomers disagreed with this observation. The question remained open, but nowadays the papers appear where such effects are clearly demonstrated [2]
Given the agreement of these data with modern scientific knowledge, the other data based Oriental wisdom should be considered carefully
In 1928, N. Roerich has established the Institute of Himalayan Studies "Urusvati". in the foothills of the Himalayas (Kullu Valley). The Institute maintained contacts with many research institutions, universities, libraries and museums around the world. Among its employees, consultants and correspondents were Albert Einstein, Robert Millikan, Louis de Broglie, Nikolai Vavilov, a famous traveler and explorer Sven Hedin. The most close links were established with scientists and cultural figures in India, such as Chandrasekhar Venkata Raman, Jagadish Chandra Bosh, Rabindranath Tagore, and many others.
Cosmic Dust in “Urusvati”

One of the activities of the Institute of Natural Science was to study cosmic rays and meteoric dust. Review by A.P. Boyarkina [3].

It was mentioned in this Review:

- the presence of rare chemical elements;
- availability of minerals and organic compounds not found on Earth;
- the ability to detect alive bacteria;
- healing properties of meteoric dust;
- its effect on soil fertility
Rare chemical elements

Iridium is of great interest. It also serves as an indicator of the origin of cosmic dust particles.

Perhaps, some other rare-earth elements can be found. To achieve this, apparently, the most powerful methods of analytical chemistry should be used.

Promising may be the method of neutron spectroscopy for the detection of heavy isotopes. But large amount of dust are necessary for this
Discovery of extraterrestrial minerals

The most modern techniques are necessary for mineralogical analysis
Possibility of discovering alive bacteria

One can hardly expect alive bacteria on particles which are products of the ablation of meteors and meteorites. Actually, the cosmic dust particles of small size reaching the Earth without heating may be the only carriers of traces of the bacterial life, and the alive bacteria as well.

D.E. Brownlee, 1984 [4]:

“…If the comest do carry life, then the direct carrier of it, may be the particles of comet dust. Interplanetary dust is probably the main form in which the substance of comets may without distraction to enter the atmosphere of terrestrial planets. However, their sizes should be small; for the Earth's atmosphere significantly smaller than 5 microns”
More about bacteria

Particles of low density entering the atmosphere at small angles may not experience significant heating even at larger sizes. Consequently, to find traces of life and bacterial life itself in cosmic dust, one should investigate chondrite particles, mostly of mellow nature.

Such particles can be well preserved in snow of Antarctica.
As for the healing properties of dust and its impact on soil fertility, then it requires the development and application of some non-standard techniques.

All this applies to the cosmogenic component, freed from any earthly interference.
References


The end

Thank you for attention!