Methane Gas Trace Detected on Mars: Evidence that there's Life in the Red Planet

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The presence of methane gas in Mars was confirmed by Curiosity, NASAs hardy rover. Was there life in Mars or is it just about to emerge? The adjustable laser spectrometer in the Sample Analysis at Mars or SAM instrument of the Curiosity robot was able to recognize an occasional rise in the presence of methane in atmosphere of the Red Planet, reports the Business Insider.

This issue is at last settled whether methane is present in Mars or not. This has been going on for more than ten years since when Earth-based telescopes first detected the presence of this gas according to the authors from the Mars Science Laboratory (MSL).

Methane is a possible by product of an organic presence. It means a certain life form must have existed in the planet sometime before. Our planet's methane is an offshoot of biological activity, most of it for that matter.

"It is a finding that puts paid to the question of the presence of methane in the Martian atmosphere but it does pose some other more complex and far-reaching questions, such as the nature of its sources," said study coauthor Francisco Javier Martin-Torres from the Andalusian Institute of Earth Sciences (CSIC-UGR) at the University of Granada, Spain.

"The sources, we believe, must lie in one or two additional sources that were not originally contemplated in the models used so far. Among these sources, we must not rule out biological methanogenesis," he added.

SAM has been tracking down vital presence of methane gas – confirming an event of periodic rise of up to 10 times this value during a period of 60 Martian days.

Basing on the latest models, if Mars really has methane gas, the most probable scenario is that it has been in the planet for approximately 300 years while slowly spreading itself in the entire planet.

The new information was gathered during the entire one Martian year, which is equivalent to almost two Earth years, during the time which Curiosity rover examined about 5 miles of the crater Gale.

The arrival of MAVEN (Mars Atmosphere and Volatile Evolution) from NASA will allow continuity for the research of this matter, the US space agency said in a statement.

A joint venture by the European Space Agency (ESA) and the Russian Space Agency (Ruscosmos) called race Gas Orbiter (TGO) will measure the amount of methane present on Mars on a bigger scale.

The paper was published in the journal Science.

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