

# NASA: There Might Have Been Life On Mars; Mars One Mission Candidates Narrowed Down to 100

NASA just found out that there may have been life on Mars.

The Curiosity rover, which is part of the space agency's Mars Science Laboratory Mission, collected data for nearly a Martian year. NASA analyzed the data and confirmed that there is methane in the environment of the Red Planet, indicating that life might have existed once.

Curiosity's tunable laser spectrometer in its SAM (Sample Analysis at Mars) detected an increase in Mar's methane concentration in the planet's atmosphere, [NDTV](#) reported.

The data from Curiosity ends a decade-long controversy that there is methane on Mars. The gas was first detected not from a space mission, but just from telescopes installed on Earth.

Methane can be produced as a result of biological activity, which is evident on Earth as almost all of methane gases originate by activity coming from animals, plants and humans. Scientists are now speculating that the methane detected from Mars was also generated due to activity from life forms.

The study's co-author Francisco Javier Martin-Torres from the University of Granada's Andalusian Institute of Earth Sciences at Spain said that even though the detection of methane answered one question, it generated more complex questions such as from where did it come from or how it came to be.

Martin-Torres said: *"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"*.

Scientists said that for methane to have existed on Mars, it would have to remain for about 300 years, which the gas would be distributed throughout the Red Planet's atmosphere.

The Curiosity rover's SAM detected basal levels of the gas concentration. It also confirmed that there was a 10 times episodic increase of the methane concentration's value within 60 Martian days, which is about 40 minutes longer than the Earth's 24-hour day.

The analyzed data came from the Curiosity's observations during 605 days, or nearly two years here on Earth, which was included in NASA's initial forecast for the nominal mission. Curiosity surveyed around 8 kilometers of the Gale crater's basin during the period.

To continue the study, the NASA's MAVEN (Mars Atmosphere and Volatile Evolution) which was first launched in the late 2013 finally arrived with additional data on the Red Planet's atmosphere.

The Russian Space Agency (Roscosmos) and the European Space Agency (ESA) collaborated and developed the Trace Gas Orbiter (TGO), which is a new instrument will be used to measure the methane concentration on the Mars' atmosphere more accurately and on a larger scale.

NASA is not the only one interested in collecting data from Mars.

The Netherland-based Mars One, a not-for-profit organization, aims to land the first humans on the Red Planet and set up a permanent human colony by 2025.

Mars One wrote on its [website](#): *"Mars is the stepping stone of the human race on its voyage into the universe. Human settlement on Mars will aid our understanding of the origins of the solar system, the origins of life and our place in the universe. As with the Apollo Moon landings, a human mission to Mars will inspire generations to*

*believe that all things are possible, anything can be achieved".*

The organization's mission include cargo missions, preparation of habitable settlement and human landings. Within the following years, Mars One is aiming to launch two rovers and communication satellites to help them on their mission.

Mars One's search for astronaut candidates began in April 2013. Over 200,000 aspiring astronauts registered for the Mars selection program. Out of all the applicants, 100 semifinalists were chosen, 30 of them are Americans. The applicants range from managers to researchers and software engineers among others.

The training for the first batch of selected applicants will begin this year. In 2018, a Demonstration Mission will be launched to the Red Planet, which will provide the proof of concept needed for the technologies crucial for a human space mission. In addition a communication satellite will also be launched on the same year at a stationary orbit on Mars. This satellite will provide the required communication between Earth and Mars for 24 hours and 7 days a week. It will also be used to pass videos, images and other data from the surface of Mars.

By 2020, Mars One will launch its rover and a Trailer that will transport the humans who will land on Mars to the outpost location. The rover will drive around a specific region on the planet to search for the best location for the human colony. Mars One will be looking for an ideal location that will be flat enough for construction and equatorial enough to harvest solar energy for their power needs.

Once a location is found, the rover will then clear the area for the solar panels and the arrival of the Cargo missions.

In 2024, the first crew will be launched and is expected to land on Mars by 2025. About a year later, the second crew will be launched.