

ORGANIC MOLECULES OF LOCALIZE ASTEROIDS.

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Introduction: Organic molecules on Asteroids should be discussed by global cycle systems of inorganic and organic materials states. Main purpose of the paper is to elucidate static organic molecules of localized Asteroids [1-3].

Two cycle systems of three states: There are two major cycle systems on active planet Earth and organic life as follows:

$$C_{\text{Total}} = C_{\text{Inorganic}} + C_{\text{Organic}} \quad (1)$$

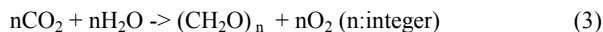
Total cycle system (C_{Total}) is mixed with inorganic cycle ($C_{\text{Inorganic}}$) and organic cycle (C_{Organic}) shown in the equation (1).

$$C_{\text{Life}} = C_{\text{Organic M}} + C_{\text{Organic SH}} \quad (2)$$

Life organic cycle system (C_{Life}) is mixed with two organic cycles of inactive monomer cycle ($C_{\text{Organic M}}$) and active super-high organic cycle ($C_{\text{Organic SH}}$) as shown in the equation (2).

Active life cycle of planet Earth: Dynamic and global cycles of the two cycles shown in the equations (1) and (2) are observed on our active planet Earth for active life molecules. In fact, active organic molecules of live activity are formed at double cyclic systems of a) global inorganic cyclic system (with three states of air, ocean water and solid rock systems), and b) localized organic cycle system of life activity [1-3].

Active organic molecules from inorganic molecules: Inorganic molecules (H_2O and CO_2) can form active supra- and high-molecules ($(\text{CH}_2\text{O})_n$) as follows [1-3]:



Organic molecules shown in the equation (3) are easily found in active planet Earth as one of active life molecules with inorganic and organic cycle systems.

Localized cycle system on Asteroids and airless planet: In Asteroids and airless planets, localized cycles are triggered by impact processes as dynamic reaction to change any molecules of inorganic and organic system [3].

Storages of any molecules on Asteroids: The interior of Asteroids and airless bodies can be formed any molecules during overlapped impact processes through the surface rocks with voids-rich regolith aggregates. The drilled instruments to collect the interior of airless bodies are inevitable to be obtained at the next related missions [3].

Summary: The present results are summarized as follows:

1) Life organic cycle system is mixed with two organic cycles of inactive monomer cycle and active organic cycle shown in the equations (1), (2) and (3).

2) Asteroids and airless planets reveal localized cycles triggered by impact processes as dynamic reaction to change any molecules of inorganic and organic system. The drilled instruments to collect the interior of airless bodies are inevitable to be obtained at the next related missions.

References: [1] Miura Y. 1994. *Astro. Soc. Pacific Conf. Series*, 63, 259–264. [2] Miura Y. 1996. *Proc. 29th ISAS Lunar and Planet. Sympo.* (ISAS, Japan), 29, 289–292. [3] Miura Y. 2013. *Submitted*.