Life based on Liquids other than Water on Freezing Water Environments like Gas Giants or Life based on Molten metal Oxides on very hot Planets like Liquid NH3 - Liquid Ammonia or liquid Methane or other Liquid Hydrocarbons or Liquid CO2, which may exist on gas giants or very cold planets.

Mars, Venus, Moon Extinct Life Finding Probability -- We should Look for 3.8 Billion Years old Rocks for LUCA 355 Genes Biomarkers related Fossils, which existed on Earth, because LUCA 355 Genes Biomarkers of last Common Ancestor of All Present Life on Earth existed at Earth Seabeds Hydrothermal Vents, 3.8 Billion Years ago, when Earth -Mars-Venus and Probably Moon Environments were similar.

3.8 Billion Years ago, LUCA 355 Genes Biomarkers of last Common Ancestor of All Present Life on Earth existed at Earth Seabeds Hydrothermal Vents, when Earth -Mars Environments were similar. So Spectroscopic Electronic Noses for LUCA 355 Genes Biomarkers related Organisms for the Fittest and therefore Likely Organisms.

So as the LUCA 355 Genes Biomarkers Organisms in the 3.8 Billion Year Mars Geological Strata, with 3.8 Billion Old Biomarkers Signature on 3.8 Billion Year Old Mars could exist, as the Fittest Gene Combination related Organisms on Mars, like the 3.8 Billion Years Old LUCA 355 Genes Organisms, which were Last Universal Common Ancestor to All Life on Earth, by referencing the 3.8 Billion Old Early Earth LUCA 355 Genes Biomarkers Template, at the Hydrothermal Vents of 3.8 Billion Old Mars Oceanic Watery Seabeds.

One of the Biggest Problem for Hunting for Life on Extra Terrestrial Worlds is What to Look for, and that is why LUCA 355 Genes Biomarkers Organisms in the 3.8 Billion Year Rocks is more relevant. We also may have to Derive what could be the Life Form with Life based on Liquids other than Water.

While most LIFE anywhere in the Universe may be Liquid WATER based on Cold Planets it may be Life based on Liquid NH3 - Liquid Ammonia or liquid Methane or other Liquid Hydrocarbons or Liquid CO2, which may exist on gas giants or very cold planets.

Normal Iron based Blood exist in most animals and fishes but Octopus, Squids have Copper based Blood, As per Wikipedia - Octopus blood contains the copper-rich protein haemocyanin to transport oxygen. In cold conditions with low oxygen levels, haemocyanin transports oxygen more efficiently than haemoglobin. The haemocyanin is dissolved in the plasma instead of being carried within blood cells, and gives the blood a bluish colour.

What we call as Life, is a Symbiosis of several Evolving Interdependent Systems , like Lichens, a composite organism that emerges from algae or cyanobacteria living among the filaments (hyphae) of the fungi in a mutually beneficial symbiotic relationship

and

our Own Body has almost Independent Systems dependent on our Body only for their Nutrients like Oxygen and Food Glucose, ATP etc. like the Brain, Blood Cells, Hepatocytes, T Cells etc.

On Hotter Planets Chemicals with Sulphur Content may exist as Liquids and the life may exist as Sulphurous Chemicals and such Life may exist at Under Sea Sulphur Rich Hydrothermal Vents or on Carbon-Di-Oxide and Sulphuric Acid Cloud Top Layers of VENUS Cloud-Top levels Gliding Mini-Airships.

Exploration of Life on Mars at at 3.8 Billion Old Mars Strata at North Pole Hot Hydrothermal Vents

: LUCA 355 Genes Biomarkers related Organisms- present on Earth 3.8 Billion Years ago at Hydrothermal Vents- when Earth- Mars Environments were similar, look for LUCA 355 Genes Organisms at 3.8 Billion Old Mars Strata at North Pole Hot Hydrothermal Vents

Exploration of Life on Mars at at 3.8 Billion Old Mars Strata at North Pole Hot Hydrothermal Vents Proposal Summary

LUCA 355 Genes Biomarkers of last Common Ancestor Organisms of All Present Life on Earth existed at Earth Seabeds Hydrothermal Vents, 3.8 Billion Years ago, when Earth -Mars-Venus Environments were similar. So the likelihood of Finding 3.8 Billion Year Old Bio-Signature Fossils on Mars (and Venus) is Substantial from the Known 3.8 Billion Year Old Organisms Bio-Signature Fossils on Earth, which existed at Earth Seabeds Hydrothermal Vents.

Basics- Theory for Finding Life Forms in 3.8 Billions Years Old Fossils on Mars

(1)3.8 Billion Years ago, LUCA 355 Genes Biomarkers of last Common Ancestor of All Present Life on Earth existed at Earth Seabeds Hydrothermal Vents, when Earth -Mars Environments were similar,

(2)Before about 3.8 Billion Years ago, Mars may have had a Denser Atmosphere and higher surface temperatures, allowing vast amounts of liquid water on the surface, possibly including a Large Ocean that may have covered one-third of the planet as Life Evolved at Seabeds Hydrothermal Vents.

(3)Similar Environments from the Formation of Planets Earth , Mars and Venus, to about 3.8 Billion Years ago, of Earth, Mars and Venus, means the likelihood of Developing similar Forms of Life from Similar Sources is High, with the Likelihood of Developing the Similar Fittest Forms of Life Highest, in pre-3.8 Billion Year for Mars, as 66% of Mars Rocks are 3.5+ Billion Years Old.

(4)Development and Survival of the Fittest - 3.8 Billion Years ago, LUCA 355 Genes Biomarkers of last Common Ancestor Organism of All Present Life on Earth, existed at Earth Seabeds Hydrothermal Vents, when Earth -Mars Environments were similar, means only LUCA 355 Genes Biomarkers Organisms survived on Earth, and so must be the Fittest Types of Organisms.

(5)Chances of Finding 3.8 Billion Year Old Bio-Signature Fossils on Mars is Substantial from the Known 3.8 Billion Year Old Organisms Bio-Signature Fossils on Earth, which existed at Earth Seabeds Hydrothermal Vents.

(6)At least two-thirds of Mars's surface is more than 3.5 billion years old, and Mars may thus hold the best record of the prebiotic conditions leading to life because of similar Earthlike Environment, even if life does not or never existed there, which might have started developing as early as 4.48 billion years ago.

(7)3.8 Billion Years ago, LUCA 355 Genes Biomarkers of Ancestor of All Present Life on Earth existed at Earth Seabed Hydrothermal Vents, when Earth -Mars Environments were similar, so have Life Lookout at the Ancient Mars Hydrothermal Vents in Martian North Pole Sea Ice Cap, for Fossils and for Life with Spectroscopic Electronic Nose for LUCA 355 Genes Biomarkers Organisms.

Probability of Finding Life Forms is the Highest in the 3.8 Years Old Martian Northern Lowland Watery Ocean Zone, with Maximum Probability around 3.8 Billion Old Northern Martian Hydrothermal Vent Features, followed by 3.8 Billion Old Northern Martian Hydrothermal Vent related Rivers which could carry ancient Micro-organisms to Deeper Northern Lowlands and followed by Life Form Finding Probability around ancient Riverbeds from Southern Highlands reaching to Northern Lowland Sea, where they met and at Southern Highlands very Deep Watery Lakes Hydrothermal Vents.

Exploration of Life on Venus with Cloud-Top levels Gliding Mini-Airships at Carbon-Di-Oxide and Sulphuric Acid Cloud Top Layers of VENUS Cloud-Top levels Gliding Mini-Airships.

Cloud-Top levels Gliding Mini-Airships on Venus made of Polysulphone Polymeric High Temperature Transparent Bend-Inflatable Polymer Shell with Helium Nitrogen on Spot Inflation and Tungsten based Instrumentation with Aerodynamic and Hydrodynamic Winged Airships with N2 at CO_2 Cloud Tops, with Helium at H_2SO_4 Clouds tops.

Roll Packed Multiple Folded Mini-Airships, Dropped as Roll, unfolding like a Flying Carpet of Multiple Serration Joined Mini-Airships and Separated by Torn Serrations as Individual Inflated Flying Winged Mini-Airships dispersed Globally by Winds at Venus Cloud Top Levels

Polysulphone Polymeric High Temperature Transparent Bend Inflatable Polymer Shell with Helium Nitrogen on Spot Inflation and Tungsten Metal based Instrumentation with Tungesten Carbide Coating Aerodynamic and Hydrodynamic Winged with Nitrogen at CO_2 Cloud Layer Top and with Helium at Suphuric Acid Clouds top levels Gliding Mini- Airships on Venus.

Life may exist in the upper cloud layers of Venus, 50 km (30 mi) up from the surface, where the temperature ranges between 303 and 353 K(30 and 80 °C; 86 and 176 °F) but the environment is acidic.

Target Achievement - Upper Cloud layers of Venus, 50 km (30 mi) up from the surface, where the temperature ranges between 303 and 353 K(30 and 80 °C; 86 and 176 °F) but the environment is acidic, Sulphuric Acid H_2SO_4 and CO_2.-

Temperature at CO_2 Cloud tops= 80 C= 353 K

Temperature at H_2SO_4 Cloud Tops 0 C= 273 K

Polysulphone working Range = 300 C = 573 K

UHMWPE working Range = 80 C = 353 K

Silicone Rubber Range = 300C = 573K Tungsten Work Range >3000 C

Polysulphone Shell -High Temperature Transparent Bend Inflatable Polymer

In Situ Rolled out and Inflated like Flying Serrated Carpet

Polysulphone is High Temperature Polymer - Stable upto 300 C.

Sulphur Backbone - Not Affected by Sulphuric Acid H2SO4

Transparent Hard Engineering Plastic

InSitu - Blowing Agent - Liquid NITROGEN N2 GAS - for CO2 Layer Cloud Top Zone InSitu - Blowing Agent - Compressed HELIUM GAS - For H2SO4 - Sulphuric Acide Layer Top

TUNGSTEN INSTRUMENTATION - with POLYSULPHONE COVER

TUNGSTEN -Not Attacked by H2SO4 -Not attacked by Concentrated Sulphuric Acid or HEAT

Four-4 Materials Co-Extruded Composite Fabric made of Polysulphone Nanofibers-Microfibers with Pure Nanofibers-Microfibers of Tungsten, with Nanofibers-Microfibers of UHMWPE - Ultra High Molecular Weight Polyethylene with Nanofibers-Microfibers of Silicone Rubber, Rolled together with a Cover Composite Film Mix of the Four-4 Materials Co-Extruded Composite and Filled with HELIUM, at Sulfuric Acid Cloud Tops.

Wings ensure that the INSTRUMENTATION will POINT UPWORD towards SKY and DOWNWORD towards VENUS GROUND

Mini- Airships will Float and Glide by Venus Cloud Top Currents to slowly Distribute and Circumnavigate Venus.

Synopses

Life based on Liquids other than Water on Freezing Water Environments like Gas Giants or Life based on Molten metal Oxides on very hot Planets like Liquid NH3 - Liquid Ammonia or liquid Methane or other Liquid Hydrocarbons or Liquid CO2, which may exist on gas giants or very cold planets.

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