

HUMAN EXPLORATION OF THE SOLAR SYSTEM SYMPOSIUM (A5)
Poster Session (P)

Author: Mr. Nikhil Dakoju
SRM University, Chennai, India, dakoju.nikhil@gmail.com

COLONIZATION OF MARS

Abstract

Mars Colonization Has Become A Major Space Expedition From Past Years. The Main Concept Is To Create A Natural Ozone Layer Barrier On Mars And Increase The Oxygen Levels Which Is An Idea That Rather Than Finding Suitable Conditions For Survival, We Can Create The Conditions Required.

SUN : The Sun Is The Central Star Of The Solar System And Is The Main Important Theme Of This Concept. Its Our Source Of Energy. The Main Concept Of Idea Is Very Simple. Here We Will Be Placing Solar Shields In The Atmosphere Of Mars Which Will Concentrate The Sun Rays Onto The Planet's Surface Thereby Causing Heating Up The Gases In The Atmosphere.

IMPORTANT ATMOSPHERIC GASES : Carbon-Dioxide, Nitrogen, Ammonia and Methane.

MARS ATMOSPHERE : Mars Lost Its Magnetosphere 4 Billion Years Ago, So The Solar Wind Interacts Directly With The Martian Ionosphere, Lowering The Atmospheric Density By Stripping Away Atoms From The Outer Layer. The Atmosphere Of Mars Consists Of About 96 percent Carbon Dioxide, 1.93 percent Argon And 1.89 percent Nitrogen Along With Traces Of Oxygen And Water.

THE CONCEPT : We Have Excess Of Nitrogen, Ammonia, Methane In Our Atmosphere Which Cause Green House Effect. First, We Will Store These Excess Gases In Storage Tanks And Deploy Them Into The Atmosphere Of Mars Thereby Forming A Gaseous Composition.

The Solar Shields Come Into The Picture Now. We Deploy Them Around Mars And Let Them Concentrate The Sun Rays To Increase The Temperature Of The Atmosphere.

When The Temperature Increases, Gases Heat Up And Chemical Reactions Start To Take Place. Carbon- Dioxide, Nitrogen Compounds And Other Gases Disintegrate Into Different Elements.

The Oxygen Molecules Form And React Together To Form Ozone Molecule. Hence Ozone Layer Is Formed In The Atmosphere. In This Way, Natural Formation Of Zone Layer Takes Place Thereby Increasing Oxygen Levels In The Atmosphere.

The Carbon And Nitrogen Elements Mix Into The Soil Of Mars Surface And Nitrification Of Soil Takes Place. This Makes The Soil Fertile And Brings It Back To Life.

The Ice Deposits In The Mars Soil In The Poles Evaporate Into Steam Due To Heating Up Of Mars Surface Via Solar Shields. The Ozone Layer Helps In Condensation Of Steam Into Liquid Water And Leads To Rainfall. This Will Help To Increase The Flora Content On Mars.

Hence The Geological Balance Is Restored And We Will Be Restoring Life Back To Mars.