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Future Energy Helium-3

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INTRODUCTION

Scientists have turned Helium-3 nuclear fuel into time crystals, which will be used by fusion rockets that will travel to Uranus in the future. Time crystals produced from helium 3 will not cause friction on the rocket. This will allow fusion rockets to reach 5 percent of the speed of light without overheating and with less fuel. Time crystals will also be used in the production of flying cars.



Helium-3 (He3) is gas that has the potential to be used as a fuel in future nuclear fusion power plants. There is very little helium-3 available on the Earth. However, there are thought to be significant supplies on the Moon. Several governments have subsequently signaled their intention to go to the Moon to mine helium-3 as a fuel supply. Such plans may come to fruition within the next two to three decades and trigger a new Space Race.

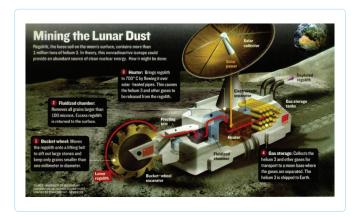
People can reach with fusion rockets to Uranus in 2 or 3 days, it means spreed of the Rocket will be 5 percent of the speed of light, 15,000 km per second. When Scientist produce super-liquid magnetic helium 3 nuclear fuel, the crystals will be the world's first exotic rocket fuel that allows it.

When fusion rockets burn with helium 3, there is no radiation during this nuclear reaction. In short, helium 3 is the cleanest nuclear fuel in the world.



MINING HELIUM-3 ON THE MOON

One of many problems associated with using helium-3 to create energy via nuclear fusion is that, at least on the Earth, helium-3 is very, very rare indeed. Helium-3 is produced as a by-product of the maintenance of nuclear weapons, which could net a supply of around 15Kg a year. Helium-3 is, however, emitted by the Sun within its solar winds. Our atmosphere prevents any of this helium-3 arriving on the Earth.



However, as it does not have an atmosphere, there is nothing to stop helium-3 arriving on the surface of the Moon and being absorbed by the lunar soil. As a result, it has been estimated that there are around 1,100,000 metric tonnes of helium-3 on the surface of the Moon down to a depth of a few metres. This helium-3 could potentially be extracted by heating the lunar dust to around 600°C , before bringing it back to the Earth to fuel a new generation of nuclear fusion power plants.

Helium 3 is only found on the Moon, Jupiter and Uranus. However, the magnetic field and the radiation belt of Jupiter are very strong and cannot be reached to surface of the Jupiter.

Then our moon and Uranus remain. Today the annual cost of extracting helium 3 from Moon is \$160 billion. Although the Moon is close to us and we can use robot miners, it is very expensive to remove helium 3 from the Moon.



Uranus has no deadly radiation belt like Jupiter, Uranus' gravity is weaker than Jupiter. That's why less fuel is needed to get in and out of Uranus orbit, so travel costs are cheaper than to travel Jupiter. Don't be surprised to get helium 3 from the atmosphere of Uranus; because half of the atoms that make up the human body come from another galaxy. As Einstein says, space-time is an indivisible whole.

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BIBLIOGRAPHY

- 1. Class C, Goldstein SL. Evolution of helium isotopes in the Earth's mantle. Nature. 2005 Aug 25;436(7054):1107-1112.
- Gonnermann HM, Mukhopadhyay S. Non-equilibrium degassing and a primordial source for helium in ocean-island volcanism. Nature. 2007;449(7165):1037-1040.
- 3. Hiyagon H, Retention of Solar Helium and Neon in IDPs in Deep Sea Sediment. Science. 19944;263(5151):1257-1259.
- 4. Stuart FM, Lass-Evans S, Fitton JG, Ellam RM, High 3He/4He ratios in picritic basalts from Baffin Island and the role of a mixed reservoir in mantle plumes. Nature. 2003;424(6944):57-59.
- 5. Albarède F. Rogue mantle helium and neon. Science. 2008;319(5865):943-945.

