In 2015 The Huygens entered Titan’s atmosphere and landed. There it measured Titan’s temperature, atmospheric pressure and the disturubiton of gases on its atmosphere. What this spacecraft sent through with only a time window of  90 minutes and how it changed our perspection of Titan is incredible. Since then some people’ve seen Titan to be most viable place that could host life in our solar system.

Titan is, besides Earth,  where stable liqiud bodies were found on the surface. Titan is also the only moon that has a dense atmosphere.Titan’s atmosphere is mostly made up from nitrogen ,similiar to Earth’s, hydrocarbons,methane,hydrogen, hydrogen cyanide, carbon dioxide, carbon monoxide and traces other gases. When mixture of gases similiar to Titan’s was exposed to energy the five nucleotide bases and aminoacids were formed. It is the first expriment done that resulted in forming of monomers were formed without water being present. There it has been suggested that life could formed in the lakes of liquid methane on Titan, from these, researchers modeled a cell membrane capable to function in liquid methane and sustain itself. Although The Cassini-Huygens mission was not equipped to detect biosignature’s evidences, that is one of the reasons why we should explore Titan more.Another evidence to suggest life is reported chemical pathways,  they consist of organic compounds to complex polcyclic aromatic hydrocarbon chemicals.Polcyclic aromatic hydrocarbons are thought to be starting materials for abiotic sytheses of materials required by the earliest forms of life.By further investigation of these chemtrails we could have a greater grasp on the evolution of the most basic life or could find basic life formed. I believe even though titan seems promising chances of organic molecules forming complex cellular structures are astronomically small especially when we consider Titan’s distance from the sun and therefor lack of uv light it gets exposed to start these reactions.

Another reason to study, Titan is even though complex organic compounds may never form living forms, it is a perfect place to study formation of organic compounds and the phases and evolution of planets. It has been speculated that Titan’s conditions resamble the conditions of the early earth. As a fan of sci-fi is always dreamed terraforming would one day become reality and Titan is perfect candidate to learn how to terraform and conduct it there.

  In conclusion, Titan is maybe the only planet in our solar system to create and sustain micro-biotic life. Even though Titan’s harsh climate may not allow this. It’s geographical and atmospheric features resemblance to Earth creates another field to study.There we could learn about not only creation of life but our own planet’s creation process and stages required to create a planet capable of micro-biotic life

Student name surname:Oğuzhan KÖKSAL

Student’s Birth Date:

School name&address& phone number:İSTANBUL BAHÇELİEVLER DEDE KORKUT ANADOLU LİSESİ

Cumhuriyet Mah. Mevlana Cad.No 3 , 34186 Bahçelievler/İstanbul

02124363451

Consultant teacher:Ilknur KAVAK ERGIN

Phone number:05068128148

e-mail: kavakilknur@hotmail.com