P036-P024 Time: May 28 17:00-18:30

Shock effects on Frozen DNA samples

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Creation of life is one of the biggest problems in science. Most of studies support the hypotheses of the chemical evolution process on the earth. Hypotheses of panspermia have not been taken seriously because the space environment due to radiations and low temperature is hazard to the life and material of life. In this study, the possibility of transference of life or life materials between adjacent planets is considered. Recent studies on the traces of life observed in ALH85001 meteorite would support such possibility. In order to know the shock effects on life materials, frozen DNA samples each contained in a steel capsule were shocked by a plasma rail gun with a projectile of 1-g and at the speed of 5-6km/s. Obtained results indicated the DNA with 50-kbp (base pair) shortened to several-tens bp, while some of remaining sample showed longer DNA-length. Further studies will be discussed.