

Artistic CG and Robot

The meaning of three-dimensional formation of creatures and the manufacturing method of that are examined from an artistic viewpoint. First, we tried to crystallize the creatures model in order to express the their colorfulfulness.

It was necessary to select carefully the material itself in order to improve expression of the butterfly itself shedding luster from color. We have been examined varied materials to realize artistic butterfly robot to explore another planet in our future.

What is an actual environment in which three-dimensional butterfly robot swims and lives?

Supposing that an environment of butterfly robot was applied to planetary space, the formative simulation was carried out to produce the search robot. Especially, it is assumed that ice exists on the arctic surface of Mars.

We will express ice as the aggregate of particles in space. The situation that the butterfly robot collides with particles has not been predicted. It was necessary to suppose what would happen. Hereupon, we tried to perform a behavioral analysis when the butterfly robot acted between particles in space.

There are a lot of beautiful living beings which have aesthetical fundamentals.

This focuses on butterflies in particular and describes scientific or engineering principles as well as applications of such aesthetical fundamentals.

We first discuss and abstract principles why butterflies are beautiful from the scientific perspectives of shape, motion, color pattern. Based on the principles we introduce our works which aim to 'predict' butterflies those might be on another Milky Way in distant future.