

Origin and evolution of interstellar organic grains

Akira Kouchi[1]

[1] Inst. Low Temp. Sci., Hokkaido Univ

We review origin and evolution of interstellar organic grains based on the infrared observations and simulation experiments. We focus our attention to: (i) condensation of carbonaceous matter in circumstellar clouds, (ii) formation of organic matter by photochemical reaction in molecular cloud, (iii) metamorphism of organic matter in diffuse cloud and (iv) evaporation metamorphism of organic matter in protosolar nebula. We compare chemical composition of cometary CHON particles with that of interstellar organic grains.