Lyman Alpha Photochemistry in the Solar Nebula

NAGW-4521

Final Report

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Abstract. This final report summarizes the significant accomplishments of research at Washington University in St. Louis for NASA Grant NAGW-4521 "Lyman Alpha Photochemistry in the Solar Nebula", Professor Bruce Fegley, Jr., PI.

Summary. The purpose of this project was to model photochemistry in the primitive solar nebula and the early solar system. As part of this modeling, it was necessary to model the composition of the gas and dust accreted by the solar nebula.

Results. The results of this project have all been published in refereed publications. These publications are listed below.

1. K. Lodders and B. Fegley, Jr. (1997) Complementary Trace Element Abundances in Meteoritic SiC Grains and Carbon Star Atmospheres. *Astrophys. J.* **484**, L1-L4.

2. K. Lodders and B. Fegley, Jr. (1997) Condensation Chemistry of Carbon Stars, in *The Astrophysical Implications of the Laboratory Study of Presolar Materials*, ed. E. Zinner, American Institute of Physics, in press.