Abstract Submitted
for the MAR08 Meeting of
The American Physical Society

TOF MS Study of Photodissociation of Borazine at 193 nm
DACHUN HUANG, VLADIMIR MAKAROV, Univ of Puerto Rico, Dept of Chem, ARTURO HIDALGO, Univ of Puerto Rico, Dept of Phys, BRAD WEINER, Univ of Puerto Rico, Dept of Chem, GERARDO MORELL, Univ of Puerto Rico, Dept of Phys — Photofragmentation of borazine molecule has been investigated in a supersonic molecular beam condition (Ar + 1% borazine mixture) by using radiation of 193 nm (250 mJ/pulse). Fragments were photo ionized using another laser (193 nm, 3 mJ/pulse) and detected by a linear time-of-flight mass spectrometer. Both lasers passed through the work area of the TOF mass spectrometer at the same time. We found that the main channel of borazine photofragmentation is formation of $B_3N_3H_5$radical and hydrogen atom. The possible mechanism was proposed and discussed.

Dachun Huang
Univ of Puerto Rico, Dept of Chem

Date submitted: 26 Nov 2007 Electronic form version 1.4