

Abstract Submitted
for the MAR09 Meeting of
The American Physical Society

Interactions of sulfur with graphite¹ KO MUNAKATA, THEODORE GEBALLE, MALCOLM BEASLEY, Geballe Laboratory for Advanced Materials, Stanford University — Possible evidence for very high temperature superconductivity at the interface of sulfur and graphite in composite materials has been reported in the literature [1]. To examine better this possibility, we are studying the interfacial electronic properties of thin UHV deposited layers of sulfur and other overlayers on graphite and few-layer graphene by means of in-situ UPS and XPS. The results of this study and its implications for the possibility of superconductivity will be presented. [1] S. Moehlecke, Y. Kopelevich, and M. B. Maple, Phys. Rev. B 69, 134519 (2004).

¹This work is supported by the AFOSR.

Ko Munakata
Geballe Laboratory for Advanced Materials, Stanford University

Date submitted: 21 Nov 2008

Electronic form version 1.4