Abstract Submitted
for the MAR12 Meeting of
The American Physical Society

Neon adsorption on oxidized single-walled carbon nanohorns[1] VAIVA KRUNGLEVICIUTE, ALDO MIGONE, Southern Illinois University Carbondale, MASAKO YUDASAKA, National Institute of Advanced Industrial Science and Technology, Nanotube Research Center, Japan, SUMIO IIJIMA, National Institute of Advanced Industrial Science and Technology, Nanotube Research Center; Fundamental Research Laboratory, NEC Corporation, Japan — We will present the results of a study of neon adsorption on oxidized single-walled carbon nanohorns. Our adsorption isotherm measurements were conducted at temperatures below 24.5 K, the triple point for Ne. Results for the effective specific surface area and for the effective pore volume of the nanohorn aggregates will be presented. We will also report on the sorbent-loading dependence of the isosteric heat of neon on the nanohorns, and on the binding energy. Our results for this system will be compared with those obtained for Ne on a sample of dahlia-like nanohorns annealed at 520 K.

[1]This work is supported by the NSF through grant DMR-1006428.

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Date submitted: 11 Nov 2011 Electronic form version 1.4