Supporting Information for:

High-Temperature Transformation of Fe-Decorated Single-Wall Carbon Nanohorns to Nanooysters: A Combined Experimental and Theoretical Study

K. R. S. Chandrakumar,^a Jason D. Readle,^c Chris Rouleau,^c Alex Puretzky,^c David B. Geohegan,^{*c} Karren More^c, Veena Krishnan,^d Mengkun Tian,^d Gerd Duscher,^{c,d} Bobby Sumpter,^c Stephan Irle,^{*b} and Keiji Morokuma*^a

^aFukui Institute of Fundamental Chemistry, Kyoto University, Kyoto 606-8103, Japan

^bInstitute for Advanced Research and Department of Chemistry, Nagoya University, Nagoya 464-8602, Japan

^cOak Ridge National Laboratory, Oak Ridge, TN, U.S.A.

^dUniversity of Tennessee, Knoxville, TN, U.S.A.

Table of Contents

Figure S1. The structures obtained at 1500 K at the trajectory endpoints. Different trajectories are identified by Roman letters A-J, and the trajectory runtime is up to at least 32 ps. Page S2.

Figure S2. The structures obtained at 2500 K at the trajectory endpoints. Different trajectories are identified by Roman letters A-J, and the trajectory runtime is up to at least 43 ps. Page S3.

[•] Corresponding Authors. E-Mail addresses: geohegandb@ornl.gov (D.B.G.), sirle@chem.nagoya-u.ac.jp (S.I.), keiji.morokuma@emory.edu (K.M.)



Figure S1. The structures obtained at 1500 K at the trajectory endpoints. Different trajectories are identified by Roman letters A-J, and the trajectory runtime is up to at least 32 ps.



Figure S2. The structures obtained at 2500 K at the trajectory endpoints. Different trajectories are identified by Roman letters A-J, and the trajectory runtime is up to at least 43 ps.