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To whom it may concern:

Re: Dr. Howard van Woert Reference Letter

Dr. van Woert requested that I provide a letter of recommendation regarding his employment at the University of Kentucky Center for Applied Energy Research. Howard has been a Research Associate working on a program titled "Direct Liquefaction of Coal" since February 1996. The objective of this program is to develop advanced methods for converting coal to distillate fuels. Dr. van Woert has been conducting experiments related to synthesizing, characterizing and evaluating new catalysts aimed toward improving the yield of distillate product.

He has synthesized a number of sulfur containing molybdenum salts using various techniques and starting materials and characterized the products using ultraviolet, infrared, Raman and nuclear magnetic resonance methods. He investigated the aquation and disproportionation reactions of oxothiomolybdenum compounds using these techniques. Preliminary results from this study were reported in a paper he presented to the Inorganic Chemistry Division Session of the National American Chemical Society Meeting in Las Vegas in August 1997. The catalyst precursors that he prepared were evaluated in experiments he conducted at high temperatures using high pressure equipment. These experiments required assembling high pressure reactors, handling gases at high pressures, and analyzing both gaseous and solid products using several different instrumental and wet-chemical methods.

Dr. van Woert has been active in searching the literature to provide background for investigating these molybdenum compounds. Literature searches were conducted using the latest available on-line searching tools available through the University Chemistry Department. From his continued efforts at searching this rather diffuse area of chemistry a broad understanding of the reactions and properties of these materials have been obtained.

Howard has worked in a group of from four to six other research investigators plus a few undergraduate students who worked at the laboratory under a cooperative program with the Chemical Engineering Department. He has pursued his work diligently and with enthusiasm and has apparently enjoyed working with this group. He has been flexible and responsive to the requests I have made of him during the time we have worked together.

If I can be of any further help, please let me know. I can be reached by phone at 606-257-0314, by FAX at 606-257-0302 or by e-mail at Givens@noah.caer.uky.edu.

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