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A Kinetic Study on the Adsorption and Reaction of Hydrogen over
Silica-supported Ruthenium and Silver-ruthenium Catalysts during
the Hydrogenation of Carbon Monoxide

by

VanderWiel, David P.

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Ames Laboratory, U.S. DOE

Iowa State University

Ames, Iowa 50011

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To my family, for a lifetime of
unconditional support and encouragement.

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