

## PAUL MARSHALL PUBLICATIONS:

178. “Kinetics and Thermochemistry of Hydroxyacetonitrile (HOCH<sub>2</sub>CN) and Its Reaction with Hydroxyl Radical” P. Marshall and J.B. Burkholder, **ACS Earth Space Chem.**, 8, 1933-1941 (2024).
177. “An Experimental, Theoretical, and Kinetic Modeling Study of Gas-Phase Sulfation of KCl” A. Chanpirak, H. Wu, P. Marshall and P. Glarborg, **Fuel**, 363, 130974 (2024).
176. “Re-Evaluation of Rate Constants for the Reaction N<sub>2</sub>H<sub>4</sub> (+ M) ⇌ NH<sub>2</sub> + NH<sub>2</sub> (+ M)” C.J. Cobos, P. Glarborg, P. Marshall and J. Troe, **Combust. Flame**, 257, 112374 (2023).  
<https://digital.library.unt.edu/ark:/67531/metadc2306829>
175. “Re-Examination of the N<sub>2</sub>O + O Reaction” P. Glarborg, J.S. Allingham, A.B. Skov, H. Hashemi and P. Marshall, **J. Phys. Chem. A**, 127, 6521-6531 (2023).  
<https://digital.library.unt.edu/ark:/67531/metadc2306833>
174. “Reactions of Hydrazine with the Amidogen Radical and Atomic Hydrogen” Y. Gao, I.M. Alecu, H. Hashemi, P. Glarborg and P. Marshall, **Proc. Combust. Inst.**, 39, 571-579 (2023).  
<https://digital.library.unt.edu/ark:/67531/metadc2306831>
173. “Experimental and Modeling Study of Water Time Histories during H<sub>2</sub>S-N<sub>2</sub>O Combustion in a Shock Tube” S.P. Cooper, P. Marshall, O. Mathieu, L.T. Pinzón, C.R. Mulvihill, P. Glarborg and E.L. Petersen, **Proc. Combust. Inst.**, 39, 487-497 (2023).  
<https://digital.library.unt.edu/ark:/67531/metadc2306820>
172. “Probing high-temperature amine chemistry: Is the reaction NH<sub>3</sub> + NH<sub>2</sub> = N<sub>2</sub>H<sub>3</sub> + H<sub>2</sub> important?” P. Marshall and P. Glarborg, **J. Phys. Chem. A**, 127, 2601-2607 (2023).  
<https://digital.library.unt.edu/ark:/67531/metadc2306830>
171. “The chemical coupling between moist CO oxidation and gas-phase potassium sulfation” A. Chanpirak, H. Hashemi, F.J. Frandsen, H. Wu, P. Glarborg and P. Marshall, **Fuel**, 336, 127127 (2023).  
<https://digital.library.unt.edu/ark:/67531/metadc2179393>
170. “Measurement of the Intramolecular Hydrogen-Shift Rate Coefficient for the CH<sub>3</sub>SCH<sub>2</sub>OO Radical between 314 and 433 K” E. Assaf, Z. Finewax, P. Marshall, P.R. Veres, J.A. Neuman and J.B. Burkholder, **J. Phys. Chem. A**, 127, 2336-2350 (2023).  
<https://digital.library.unt.edu/ark:/67531/metadc2306828>
169. “An experimental and chemical kinetic modeling study of the role of potassium in the moist oxidation of CO” A. Chanpirak, H. Wu, P. Glarborg and P. Marshall, **Fuel**, 335, 127075 (2023).  
<https://digital.library.unt.edu/ark:/67531/metadc2178685>

168. “Optical in-situ measurements and modeling of post-flame sulfation of NaOH(g) and NaCl(g)” D. Schmid, W. Weng, S. Li, O. Karlström, M. Hupa, Z. Li, P. Glarborg, P. Marshall and M. Aldén, **Fuel**, 332, 126337 (2023).  
<https://digital.library.unt.edu/ark:/67531/metadc2179392>
167. “Experimental and Computational Studies of the Kinetics of the Reaction of Hydrogen Peroxide with the Amidogen Radical” I.M. Alecu, Y. Gao and P. Marshall, **J. Chem. Phys.**, 157, 014304 (2022).
166. “Comment on ‘Extremely Rapid Self-Reactions of Hydrochlorofluoromethanes and Hydrochlorofluoroethanes and Implications in Destruction of Ozone’ ” P. Marshall and J.B. Burkholder, **Chem. Phys. Lett.**, 800, 139411 (2022).  
<https://digital.library.unt.edu/ark:/67531/metadc2306815>
165. “Participation of Alkali and Sulfur in Ammonia Combustion Chemistry: Investigation for Ammonia/Solid Fuel Co-Firing Applications” W. Weng, Z. Li, P. Marshall and P. Glarborg, **Combust. Flame**, 244, 112236 (2022).  
<https://digital.library.unt.edu/ark:/67531/metadc2178684>
164. “An Experimental and Modeling Study on Auto-Ignition Kinetics of Ammonia/Methanol Mixtures at Intermediate Temperature and High Pressure” M. Li, X. He, H. Hashemi, P. Glarborg, V.M. Lowe, P. Marshall, R. Fernandes and B. Shu, **Combust. Flame**, 242, 112160 (2022).  
<https://digital.library.unt.edu/ark:/67531/metadc2306812>
163. “Gas-Phase Chemistry of 1,1,2,3,3,4,4-Heptafluorobut-1-ene Initiated by Chlorine Atoms” R. Sapkota and P. Marshall, **Molecules**, 27, 647 (2022).  
<https://digital.library.unt.edu/ark:/67531/metadc1954002>
162. “Challenges in Kinetic Modeling of Ammonia Pyrolysis” P. Glarborg, H. Hamid and P. Marshall, **Fuel Commun.**, 10, 100049 (2022).
161. “Computational Study of the Gas-Phase Reactions of Sulfuric Acid with OH(<sup>2</sup>P<sub>J</sub>), O(<sup>3</sup>P<sub>J</sub>), Cl(<sup>2</sup>P<sub>J</sub>) and O(<sup>1</sup>D) Radicals” P. Marshall and J.B. Burkholder, **Chem. Phys. Lett.**, 787, 139203 (2022).  
<https://digital.library.unt.edu/ark:/67531/metadc2306816>
160. “New Reactions of Diazene and Related Species for Modelling Combustion of Amine Fuels” P. Marshall, G. Rawling and P. Glarborg, **Mol. Phys.**, 119, e1979674 (2021).  
<https://digital.library.unt.edu/ark:/67531/metadc2243702>
159. “Theoretical Modeling Study of the Reaction  $H + CF_4 \rightarrow HF + CF_3$ ” C.J. Cobos, G. Knight, P. Marshall and J. Troe, **Int. J. Chem. Kinet.**, 53, 939-945 (2021).  
<https://digital.library.unt.edu/ark:/67531/metadc1852325>

158. "Selective Noncatalytic Reduction of NO<sub>x</sub> using Ammonium Sulfate" K.R.K. Krum, M. Jensen, S. Li, T. Norman, P. Marshall, H. Wu and P. Glarborg, **Energy and Fuels**, 35, 12392-12402 (2021).  
<https://digital.library.unt.edu/ark:/67531/metadc2243700>
157. "Experimental and Kinetic Modeling Study of Oxidation of Acetonitrile" M.U. Alzueta, M. Guerrero, A. Millera, P. Marshall and P. Glarborg, **Proc. Combust. Inst.**, 38, 575-583 (2021).  
<https://digital.library.unt.edu/ark:/67531/metadc2243697>
156. "Acetaldehyde Oxidation at High Pressure" H. Hashemi, J.M. Christensen, P. Marshall and P. Glarborg, **Proc. Combust. Inst.**, 38, 269-278 (2021).  
<https://digital.library.unt.edu/ark:/67531/metadc2243696>
155. "Kinetic Fall-Off Behavior for the Cl + Furan-2,5-dione (C<sub>4</sub>H<sub>2</sub>O<sub>3</sub>, Maleic Anhydride) Reaction" A. Chattopadhyay, T. Gierczak, P. Marshall, V.C. Papadimitriou and J.B. Burkholder, **Phys. Chem. Chem. Phys.**, 23, 4901-4911 (2021).  
<https://digital.library.unt.edu/ark:/67531/metadc2243701>
154. "Ignition Delay Times of NH<sub>3</sub>/DME Blends at High Pressure and Low DME fraction: RCM Experiments and Simulations" L. Dai, H. Hashemi, P. Glarborg, S. Gersen, P. Marshall, A. Mokhov and H. Levinsky, **Combust. Flame**, 227, 120-134 (2021).  
<https://digital.library.unt.edu/ark:/67531/metadc2243706>
153. "Oxidation of Methylamine" P. Glarborg, C.S. Andreasen, H. Hashemi, R. Qian and P. Marshall, **Int. J. Chem. Kinet.**, 52, 893-906 (2020).  
<https://digital.library.unt.edu/ark:/67531/metadc2243705>
152. "Temperature-Dependent Rate Coefficients for the Gas-Phase OH + Furan-2,5-dione (C<sub>4</sub>H<sub>2</sub>O<sub>3</sub>, Maleic Anhydride) Reaction" A. Chattopadhyay, V.C. Papadimitriou, P. Marshall and J.B. Burkholder, **Int. J. Chem. Kinet.**, 52, 623-631 (2020).  
<https://digital.library.unt.edu/ark:/67531/metadc2243707>
151. "Climate Metrics for C1-C4 Hydrofluorocarbons (HFCs)" J.B. Burkholder, P. Marshall, P.P. Bera, J.S. Francisco and T.J. Lee, **J. Phys. Chem. A**, 124, 4793-4800 (2020).  
<https://digital.library.unt.edu/ark:/67531/metadc1706544/>
150. "UV and Infrared Absorption Spectra and 248 nm Photolysis of Maleic Anhydride (C<sub>4</sub>H<sub>2</sub>O<sub>3</sub>)" P. Marshall, V.C. Papadimitriou, D.K. Papanastasiou, J.M. Roberts and J.B. Burkholder, **J. Photochem. Photobiol. A**, 382, 111953 (2019).  
<https://digital.library.unt.edu/ark:/67531/metadc1706545/>
149. "The C<sub>2</sub>H<sub>2</sub> + NO<sub>2</sub> Reaction: Implications for High Pressure Oxidation of C<sub>2</sub>H<sub>2</sub>/NO<sub>x</sub> Mixtures" P. Marshall, C. Leung, J. Gimenez-Lopez, C.T. Rasmussen, H. Hashemi, P. Glarborg, M. Abian, M.U. Alzueta, **Proc. Combust. Inst.**, 37, 469-476 (2019).  
<https://digital.library.unt.edu/ark:/67531/metadc1531975>

148. "Experimental and Computational Studies of the Kinetics of the Reaction of Hydrogen Atoms with Carbon Disulfide" K.E. Kerr, Y. Gao and P. Marshall, **Proc. Combust. Inst.**, 37, 373-379 (2019).  
<https://digital.library.unt.edu/ark:/67531/metadc1531971>
147. "Rate Coefficient Measurements and Theoretical Analysis of the OH + (E)-CF<sub>3</sub>CH=CHCF<sub>3</sub> Reaction" M. Baasandorj, P. Marshall, R.L. Waterland, A.R. Ravishankara and J.B. Burkholder, **J. Phys. Chem. A**, 122, 4635-4646 (2018).  
<https://digital.library.unt.edu/ark:/67531/metadc1533636>
146. "Global Warming Potential Estimates for the C1-C3 Hydrochlorofluorocarbons (HCFCs) included in the Kigali Amendment to the Montreal Protocol" D.K. Papanastasiou, A. Beltrone, P. Marshall and J.B. Burkholder, **Atmos. Chem. Phys.**, 18, 6317-6330 (2018).  
<https://digital.library.unt.edu/ark:/67531/metadc1164528>
145. "Ab Initio Calculations and Kinetic Modeling of Thermal Conversion of Methyl Chloride: Implications for Gasification of Biomass" M. Singla, M.L. Rasmussen, H. Hashemi, H. Wu, P. Glarborg, M. Pelucchi, T. Faravelli and P. Marshall, **Phys. Chem. Chem. Phys.**, 20, 10741-10752 (2018). <https://digital.library.unt.edu/ark:/67531/metadc1164551>
144. "Relative Rate Studies of the Reactions of Atomic Chlorine with Acetone and Cyclic Ketones" T.N. Herath, I. Orozco, E.C. Clinch and P. Marshall, **Int. J. Chem. Kinet.**, 50, 41-46 (2018).  
<https://digital.library.unt.edu/ark:/67531/metadc1164534>
143. "Experimental and theoretical studies of the reactions of ground-state sulfur atoms with hydrogen and deuterium" K.M. Thompson, Y. Gao, P. Marshall, H. Wang, L. Zhou, Y. Li and H. Guo, **J. Chem. Phys.**, 147, 134302 (2017)  
<https://digital.library.unt.edu/ark:/67531/metadc1010764>
142. "Representing Global Reactive Potential Energy Surfaces Using Gaussian Processes" B. Kolb, P. Marshall, B. Zhao, B. Jiang and H. Guo, **J. Phys. Chem. A**, 121, 2552-2557 (2017).  
<https://digital.library.unt.edu/ark:/67531/metadc990976/>
141. "Importance of the Hydrogen Isocyanide Isomer in Modeling Hydrogen Cyanide Oxidation in Combustion" P. Marshall and P. Glarborg, **Energy Fuels**, 31, 2156-2163 (2017).  
<https://digital.library.unt.edu/ark:/67531/metadc974469>
140. "An Exploratory Flow Reactor Study of H<sub>2</sub>S Oxidation at 30-100 Bar" Y. Song, H. Hashemi, J.M. Christensen, C. Zou, B.S. Haynes, P. Marshall and P. Glarborg, **Int. J. Chem. Kinet.**, 49, 37-52 (2017).  
<https://digital.library.unt.edu/ark:/67531/metadc1706550/>

139. “Relative Rate and Product Studies of the Reactions of Atomic Chlorine with Tetrafluoroethylene, 1,2-Dichloro-1,2-difluoroethylene, 1,1-Dichloro-2,2-difluoroethylene, and Hexafluoro-1,3-butadiene in the Presence of Oxygen” T.N. Herath, E.C. Clinch, I. Orozco, E.L. Raign and P. Marshall, **J. Phys. Chem. A**, 120, 7311–7319 (2016).  
<https://digital.library.unt.edu/ark:/67531/metadc974461>
138. “Experimental and Kinetic Modeling Study of C<sub>2</sub>H<sub>2</sub> Oxidation at High Pressure” J. Gimenez-Lopez, C.T. Rasmussen, H. Hashemi, M. U. Alzueta, Y. Gao, P. Marshall, C. F. Goldsmith and P. Glarborg, **Int. J. Chem. Kinet.**, 48, 724-738 (2016).  
<https://digital.library.unt.edu/ark:/67531/metadc1706551/>
137. “Ammonia Oxidation at High Pressure and Intermediate Temperatures” Y. Song, H. Hashemi, J.M. Christensen, C. Zou, P. Marshall and P. Glarborg, **Fuel**, 181, 358-365 (2016).  
<https://digital.library.unt.edu/ark:/67531/metadc991012/>
136. “The Spin-Forbidden Reaction of Ground-State Sulfur Atoms with Ethylene” K.M. Thompson, Y. Gao and P. Marshall, **Int. J. Chem. Kinet.**, 48, 124-130 (2016).  
<https://digital.library.unt.edu/ark:/67531/metadc1164538/>
135. “The Reaction Kinetics of Amino Radicals with Sulfur Dioxide” Y. Gao, P. Glarborg and P. Marshall, **Z. Phys. Chem.**, 229, 1649-1661 (2015).  
<https://digital.library.unt.edu/ark:/67531/metadc801965>
134. “Experimental and Computational Studies of the Kinetics of the Reaction of Atomic Hydrogen with Methanethiol” K.E. Kerr, I.M. Alecu, K.M. Thompson, Y. Gao and P. Marshall, **J. Phys. Chem. A**, 119, 7352-7360 (2015).  
<http://digital.library.unt.edu/ark:/67531/metadc699764/>
133. “Glyoxal Oxidation Mechanism: Implications for the Reactions HCO + O<sub>2</sub> and OCHCHO + HO<sub>2</sub>” N. Faßheber, G. Friedrichs, P. Marshall and P. Glarborg, **J. Phys. Chem. A**, 119, 7305-7315 (2015).  
<http://digital.library.unt.edu/ark:/67531/metadc699769/>
132. “Temperature- and Pressure-Dependence of the Reaction S + CS (+M) → CS<sub>2</sub> (+M)” P. Glarborg, P. Marshall and J. Troe, **J. Phys. Chem. A**, 119, 7277-7281 (2015).  
<http://digital.library.unt.edu/ark:/67531/metadc699782/>
131. “High-Temperature Kinetics of the Reaction between Chlorine Atoms and Hydrogen Sulfide” Y. Gao, I. M. Alecu, A. Goumri and P. Marshall, **Chem. Phys. Lett.**, 624, 83-86 (2015).  
<http://digital.library.unt.edu/ark:/67531/metadc725815/>
130. “Rate Constant and Thermochemistry for K+O<sub>2</sub>+N<sub>2</sub> = KO<sub>2</sub>+N<sub>2</sub>” T. Sorvajärvi, J. Viljanen, J. Toivonen, P. Marshall and P. Glarborg, **J. Phys. Chem. A**, 119, 3329-3336 (2015).  
<http://digital.library.unt.edu/ark:/67531/metadc725772/>

129. “Kinetic Studies of the Reaction of Atomic Sulfur with Acetylene” S. Ayling, Y. Gao and P. Marshall, **Proc. Combust. Inst.**, 35, 215-222 (2015).  
<http://digital.library.unt.edu/ark:/67531/metadc501395/>
128. “Ab Initio and Kinetic Modeling Studies of Formic Acid Oxidation” P. Marshall and P. Glarborg, **Proc. Combust. Inst.**, 35, 153-160 (2015).  
<http://digital.library.unt.edu/ark:/67531/metadc725873/>
127. “Computational Study of the Thermochemistry of  $N_2O_5$  and the Kinetics of the Reaction  $N_2O_5 + H_2O \rightarrow 2 HNO_3$ ” I. M. Alecu and P. Marshall, **J. Phys. Chem. A** 118, 11405-11416 (2014).  
<http://digital.library.unt.edu/ark:/67531/metadc488165/>
126. “Oxidation of Reduced Sulfur Species: Carbon Disulfide” P. Glarborg, B. Halaburt, P. Marshall, A. Guillory, J. Troe, M. Thellefsen and K. Christensen, **J. Phys. Chem. A** 118, 6798–6809 (2014).  
<http://digital.library.unt.edu/ark:/67531/metadc488161/>
125. “Kinetic studies of the reaction  $NH_2 + H_2S$ ” Y. Gao and P. Marshall, **Chem. Phys. Lett.** 594, 30 (2014).  
<http://digital.library.unt.edu/ark:/67531/metadc501425/>
124. “Rate Constant and Branching Fraction for the  $NH_2 + NO_2$  Reaction” S.J. Klippenstein, L.B. Harding, P. Glarborg, Y. Gao, H. Hu and P. Marshall, **J. Phys. Chem. A** 117, 9011 (2013).  
<http://digital.library.unt.edu/ark:/67531/metadc488184/>
123. “Oxidation of Reduced Sulfur Species: Carbonyl Sulfide” P. Glarborg and P. Marshall, **Int. J. Chem. Kinet.** 45, 429 (2013).  
<http://digital.library.unt.edu/ark:/67531/metadc488162/>
122. “Gas Phase Kinetics and Equilibrium of Allyl Radical Reactions with NO and  $NO_2$ ” M. P. Rissanen, D. Amedro, L. Krasnoperov, P. Marshall and R. S. Timonen, **J. Phys. Chem. A** 113, 793 (2013).  
<http://digital.library.unt.edu/ark:/67531/metadc488138/>
121. “Experimental and Kinetic Modeling Study of Methanol Ignition and Oxidation at High Pressure” V. Aranda, J. M. Christensen, M. U. Alzueta, P. Glarborg, S. Gersen, Y. Gao, P. Marshall, **Int. J. Chem. Kinet.** 45, 283 (2013).  
<http://digital.library.unt.edu/ark:/67531/metadc725829/>
120. “Rate Constant for the Reaction  $C_2H_5 + HBr \rightarrow C_2H_6 + Br$ ” D.M. Golden, J. Peng, A. Goumri, J. Yuan and P. Marshall, **J. Phys. Chem. A**, 116, 5847 (2012).  
<http://digital.library.unt.edu/ark:/67531/metadc501410/>

119. “Fuel-Nitrogen Conversion in the Combustion of Small Amines using Dimethylamine and Ethylamine as Biomass-Related Model Fuels” A. Lucassen, K. Zhang, J. Warkentin, K. Mohammad, P. Glarborg, P. Marshall and K. Kohse-Hoinghaus, **Combust. Flame.**, 159, 2254 (2012).  
<http://digital.library.unt.edu/ark:/67531/metadc725806/>
118. “Inhibition of Hydrogen Oxidation by HBr and Br<sub>2</sub>” G. Dixon-Lewis, P. Marshall, B. Ruscic, A. Burcat, E. Goos, A. Cuoci, A. Frassoldati, T. Faravelli and P. Glarborg, **Combust. Flame**, 159, 528 (2012).  
<http://digital.library.unt.edu/ark:/67531/metadc725868/>
117. “Kinetic and Theoretical Investigations of the S + NO<sub>2</sub> Reaction” K.M. Thompson, Y. Gao and P. Marshall, **Int. J. Chem. Kinet.**, 44, 90 (2012).  
<http://digital.library.unt.edu/ark:/67531/metadc501409/>
116. “An Experimental and Computational Study of the Reaction of Ground-State Sulfur Atoms with Carbon Disulfide” Y. Gao and P. Marshall, **J. Chem. Phys.**, 135, 144306 (2011).  
<http://digital.library.unt.edu/ark:/67531/metadc699830/>
115. “Predicted Thermochemistry and Unimolecular Kinetics of Nitrous Sulfide” P. Marshall, Y. Gao and P. Glarborg, **J. Chem. Phys.**, 135, 094301 (2011).  
<http://digital.library.unt.edu/ark:/67531/metadc699833/>
114. “Kinetic and Modeling Studies of the Reaction S + H<sub>2</sub>S” Y. Gao, C. Zhou, K. Sendt, B.S. Haynes and P. Marshall, **Proc. Combust. Inst.**, 33, 459 (2011).  
<http://digital.library.unt.edu/ark:/67531/metadc725809/>
113. “High-Pressure Oxidation of C<sub>2</sub>H<sub>4</sub>/NO Mixtures” J. Giménez-López, M.U. Alzueta, C.T. Rasmussen, P. Marshall and P. Glarborg, **Proc. Combust. Inst.**, 33, 449 (2011).  
<http://digital.library.unt.edu/ark:/67531/metadc725862/>
112. “An Experimental and Theoretical Study of the Reaction between NH(X<sup>3</sup>Σ<sup>-</sup>) and SO(X<sup>3</sup>Σ<sup>-</sup>)” M.A. Blitz, R.J. Shannon, P. Marshall and M.J. Pilling, **Z. Phys. Chem.** 224, 1009 (2010).  
<http://digital.library.unt.edu/ark:/67531/metadc699828/>
111. “Atmospheric Chemistry of Isopropyl Formate and tert-Butyl Formate” A.S. Pimentel, G.S. Tyndall, J.J. Orlando, M.D. Hurley, T.J. Wallington, M.P.S. Andersen, P. Marshall, T.S. Dibble, **Int. J. Chem. Kinet.**, 42, 479 (2010).  
<http://digital.library.unt.edu/ark:/67531/metadc501407/>
110. “Enthalpy of Formation of the Cyclohexadienyl Radical and the C–H Bond Enthalpy of 1,4-Cyclohexadiene: An Experimental and Computational Re-Evaluation” Y. Gao, N.J. DeYonker, E. C. Garrett, III, A.K. Wilson, T.R. Cundari and P. Marshall, **J. Phys. Chem. A**, 113, 6955 (2009).  
<http://digital.library.unt.edu/ark:/67531/metadc107802/>

109. “The Rate Constant for the CO + H<sub>2</sub>O<sub>2</sub> Reaction”, P. Glarborg and P. Marshall, **Chem. Phys. Lett.**, 475, 40 (2009).  
<http://digital.library.unt.edu/ark:/67531/metadc725773/>
108. “Kinetic Studies of the Reaction of Atomic Chlorine with Chlorobenzene”, Y. Gao and P. Marshall, **Chem. Phys. Lett.**, 469, 266 (2009).  
<http://digital.library.unt.edu/ark:/67531/metadc725795/>
107. “Experimental and Kinetic Modeling Study of C<sub>2</sub>H<sub>4</sub> Oxidation at High Pressure”, J.G. Lopez, C.L. Rasmussen, M.U. Alzueta, Y. Gao, P. Marshall and P. Glarborg, **Proc. Combust. Inst.**, 32, 367 (2009).  
<http://digital.library.unt.edu/ark:/67531/metadc725792/>
106. “Kinetic Studies of Chlorobenzene Reactions with Hydrogen Atoms and Phenyl Radicals and the Thermochemistry of 1-Chlorocyclohexadienyl Radicals”, Y. Gao and P. Marshall, **Proc. Combust. Inst.**, 32, 351 (2009).  
<http://digital.library.unt.edu/ark:/67531/metadc725769/>
105. “Rate Constants and Hydrogen Isotope Substitution Effects in the CH<sub>3</sub> + HCl and CH<sub>3</sub> + Cl<sub>2</sub> Reactions”, A. J. Eskola, R. S. Timonen, P. Marshall, E. N. Chesnokov, and L. N. Krasnoperov, **J. Phys. Chem. A**, 112, 7391 (2008).  
<http://digital.library.unt.edu/ark:/67531/metadc499076/>
104. “Experimental Measurements and Kinetic Modeling of CO/H<sub>2</sub>/O<sub>2</sub>/NO<sub>x</sub> Conversion at High Pressure”, C. L. Rasmussen, J. Hansen, P. Marshall, and P. Glarborg, **Int. J. Chem. Kinet.**, 40, 454 (2008).  
<http://digital.library.unt.edu/ark:/67531/metadc501427/>
103. “An Exploratory Study of Alkali Sulfate Aerosol Formation during Biomass Combustion”, L. Hindiyarti, F. Frandsen, H. Livbjerg, P. Glarborg and P. Marshall, **Fuel**, 87, 1591 (2008).  
<http://digital.library.unt.edu/ark:/67531/metadc503228/>
102. “Computational Studies of the Thermochemistry of the Atmospheric Iodine Reservoirs HOI and IONO<sub>2</sub>”, P. Marshall, **Adv. Quantum Chem.**, 55, 159 (2008).  
<http://digital.library.unt.edu/ark:/67531/metadc501413/>
101. “A Kinetic Study of the Reaction of Atomic Hydrogen with Iodobenzene”, Y. Gao, K. Fessel, C. McLeod and P. Marshall, **Chem. Phys. Lett.**, 451, 8 (2008).  
<http://digital.library.unt.edu/ark:/67531/metadc503249/>
100. “Reactions of SO<sub>3</sub> with the O/H Radical Pool under Combustion Conditions”, L. Hindiyarti, P. Glarborg and P. Marshall, **J. Phys. Chem. A.**, 111, 3984 (2007).  
<http://digital.library.unt.edu/ark:/67531/metadc499072/>

99. “Studies of the Kinetics and Thermochemistry of the Forward and Reverse Reaction  $\text{Cl} + \text{C}_6\text{H}_6 = \text{HCl} + \text{C}_6\text{H}_5$ ”, I. M. Alecu, Y. Gao, P.-C. Hsieh, J.P. Sand, A. Ors, A. McLeod and P. Marshall, **J. Phys. Chem. A.**, 111, 3970 (2007).  
<http://digital.library.unt.edu/ark:/67531/metadc501397/>
98. “Metal ion-molecule kinetics at combustion temperatures: The reaction of  $\text{Ca}^+$  with  $\text{O}_2$ ”, B. Cosic, A. Ermoline, A. Fontijn and P. Marshall, **Proc. Combust. Inst.**, 31, 349 (2007).  
<http://digital.library.unt.edu/ark:/67531/metadc725787/>
97. “Mechanisms of radical removal by  $\text{SO}_2$ ”, C.L. Rasmussen, P. Glarborg and P. Marshall, **Proc. Combust. Inst.**, 31, 339 (2007).  
<http://digital.library.unt.edu/ark:/67531/metadc725872/>
96. “Kinetics and Thermochemistry of the Addition of Atomic Chlorine to Acetylene”, Y. Gao, I.M. Alecu, P.-C. Hsieh, A. McLeod, C. McLeod, M. Jones and P. Marshall, **Proc. Combust. Inst.**, 31, 193 (2007).  
<http://digital.library.unt.edu/ark:/67531/metadc725849/>
95. “The Relaxation of  $\text{OH} (v=1)$  and  $\text{OD} (v=1)$  by  $\text{H}_2\text{O}$  and  $\text{D}_2\text{O}$  at Temperatures from 251 to 390 K”, D.C. McCabe, B. Rajakumar, P. Marshall, I.W.M. Smith and A.R. Ravishankara, **Phys. Chem. Chem. Phys.**, 8, 4563 (2006).  
<http://digital.library.unt.edu/ark:/67531/metadc501402/>
94. “The Reaction of  $\text{OH}$  with Acetaldehyde and Deuterated Acetaldehyde: Further Insight into the Reaction Mechanism at both Low and Elevated Temperatures”, P.H. Taylor, T. Yamada and P. Marshall, **Int. J. Chem. Kinet.**, 38, 489 (2006).  
<http://digital.library.unt.edu/ark:/67531/metadc501415/>
93. “Kinetics of the  $\text{NH} + \text{H}_2$  Reaction and Reassessment of  $\text{HNO}$  Formation from  $\text{NH} + \text{CO}_2$ ,  $\text{H}_2\text{O}$ ”, A. Fontijn, S.M. Shamsuddin, D. Crammond, P. Marshall and W.R. Anderson, **Combust. Flame**, 145, 543 (2006).  
<http://digital.library.unt.edu/ark:/67531/metadc725851/>
92. “Thermochemistry is not a Lower Bound to the Activation Energy of Endothermic Reactions: A Kinetic Study of the Gas-Phase Reaction of Atomic Chlorine with Ammonia”, Y. Gao, I.M. Alecu, P.-C. Hsieh, B.P. Morgan, P. Marshall and L.N. Krasnoperov, **J. Phys. Chem. A**, 110, 6844 (2006).  
<http://digital.library.unt.edu/ark:/67531/metadc501422/>
91. “Thermal Dissociation of  $\text{SO}_3$  at 1000-1400 K”, A. Yilmaz, L. Hindiyarti, A.K. Jensen, P. Glarborg and P. Marshall, **J. Phys. Chem. A**, 110, 6654 (2006).  
<http://digital.library.unt.edu/ark:/67531/metadc501428/>
90. “Modified Transition State Theory and Negative Apparent Activation Energies of Simple Metathesis Reactions: Application to the Reaction  $\text{CH}_3 + \text{HBr} \rightarrow \text{CH}_4 + \text{Br}$ ”, L.N. Krasnoperov, J. Peng and P. Marshall, **J. Phys. Chem. A**, 110, 3110 (2006).  
<http://digital.library.unt.edu/ark:/67531/metadc501392/>

89. "A Computational Study of the Thermochemistry of Bromine and Iodine-Containing Methanes and Methyl Radicals", P. Marshall, G.N. Srinivas and M. Schwartz, **J. Phys. Chem. A**, 109, 6371 (2005).  
<http://digital.library.unt.edu/ark:/67531/metadc501401/>
88. "Mechanism and Modeling of the Formation of Gaseous Alkali Sulfates", P. Glarborg and P. Marshall, **Combust. Flame**, 141, 22 (2005).  
<http://digital.library.unt.edu/ark:/67531/metadc501445/>
87. "A Kinetic Study of the Reaction of Atomic Oxygen with SO<sub>2</sub>", J. Naidoo, A. Goumri and P. Marshall, **Proc. Combust. Inst.**, 30, 1219 (2005).  
<http://digital.library.unt.edu/ark:/67531/metadc503256/>
86. "Reaction Kinetics of the Addition of Atomic Sulfur to Nitric Oxide", A. Goumri, D.D. Shao and P. Marshall, **J. Chem. Phys.**, 121, 9999 (2004).  
<http://digital.library.unt.edu/ark:/67531/metadc501426/>
85. "Kinetic Studies of the Cl + HI Reaction using Three Techniques", J. Yuan, A. Misra, A. Goumri, D.D. Shao and P. Marshall, **J. Phys. Chem. A**, 108, 6857 (2004).  
<http://digital.library.unt.edu/ark:/67531/metadc501414/>
84. "An Investigation of the Reaction of CH<sub>3</sub>S with CO", L.C. Koch, P. Marshall, A.R. Ravishankara, **J. Phys. Chem. A**, 108, 5205 (2004).  
<http://digital.library.unt.edu/ark:/67531/metadc501386/>
83. "The Reaction of OH with Acetone and Acetone-d<sub>6</sub> from 298 to 832 K: Rate Coefficients and Mechanism", T. Yamada, P.H. Taylor, A. Goumri and P. Marshall, **J. Chem. Phys.**, 119, 10600 (2003).  
<http://digital.library.unt.edu/ark:/67531/metadc499085/>
82. "Kinetic Studies of the Reactions of Hydroxyl Radicals with the Methyl-Substituted Silanes SiH<sub>n</sub>(CH<sub>3</sub>)<sub>4-n</sub> (n=0 to 4) at Room Temperature", A. Goumri, J. Yuan, E.L. Hommel and P. Marshall, **Chem. Phys. Lett.**, 375, 149 (2003).  
<http://digital.library.unt.edu/ark:/67531/metadc503263/>
81. "A Computational Study of Chlorofluoro-Methyl Radicals", M. Schwartz, L.R. Peebles, R.J. Berry and P. Marshall, **J. Chem. Phys.**, 118, 557 (2003).  
<http://digital.library.unt.edu/ark:/67531/metadc501416/>
80. "A Coupled-Cluster Study of the Enthalpy of Formation of Nitrogen Sulfide, NS", L. R. Peebles and P. Marshall, **Chem. Phys. Lett.**, 366, 520 (2002).  
<http://digital.library.unt.edu/ark:/67531/metadc501383/>
79. "High-Accuracy Coupled-Cluster Computations of Bond Dissociation Energies in SH, H<sub>2</sub>S, and H<sub>2</sub>O", L. R. Peebles and P. Marshall, **J. Chem. Phys.**, 117, 3132 (2002).  
<http://digital.library.unt.edu/ark:/67531/metadc501387/>

78. “Rate Coefficient and Product Branching Measurements for the Reaction OH + Bromopropane from 230 to 360 K”, M. K. Gilles, J. B. Burkholder, T. Gierczak, P. Marshall and A. R. Ravishankara, **J. Phys. Chem. A**, 106, 5358 (2002).  
<http://digital.library.unt.edu/ark:/67531/metadc501405/>
77. “The Kinetics of the Reaction of H Atoms with C<sub>4</sub>F<sub>6</sub>”, X. Hu, A. Goumri and P. Marshall, **J. Phys. Chem. A**, 105, 11220 (2001).  
<http://digital.library.unt.edu/ark:/67531/metadc501384/>
76. “Rate Coefficients and Mechanistic Analysis for Reaction of OH with Vinyl Chloride between 293 and 730 K”, T. Yamada, M. Siraj, P. H. Taylor, J. Peng, X. Hu and P. Marshall, **J. Phys. Chem. A**, 105, 9436 (2001).  
<http://digital.library.unt.edu/ark:/67531/metadc501412/>
75. “Rate Coefficients and Mechanistic Analysis for the Reaction of Hydroxyl Radicals with 1,1-Dichloroethylene and *trans*-1,2-Dichloroethylene over an Extended Temperature Range”, T. Yamada, A. El-Sinawi, M. Siraj, P. H. Taylor, J. Peng, X. Hu and P. Marshall, **J. Phys. Chem. A**, 105, 7588 (2001).  
<http://digital.library.unt.edu/ark:/67531/metadc501404/>
74. “Kinetic Studies of the Reaction of Hydroxyl Radicals with Trichloroethylene and Tetrachloroethylene”, L. B. Tichenor, A. El-Sinawi, T. Yamada, P. H. Taylor, J. Peng, X. Hu and P. Marshall, **Chemosphere**, 42, 571 (2001).  
<http://digital.library.unt.edu/ark:/67531/metadc501388/>
73. “Reaction of Hydroxyl Radicals with Trichloroethylene: Evidence for Chlorine Elimination Channels at Elevated Temperatures”, L. B. Tichenor, A. J. Lozada-Ruiz, T. Yamada, A. El-Sinawi, P. H. Taylor, J. Peng, X. Hu and P. Marshall, **Proc. Combust. Inst.**, 28, 1495 (2000).  
<http://digital.library.unt.edu/ark:/67531/metadc501424/>
72. “Kinetic and Modeling Studies of the Reaction of Hydroxyl Radicals with Tetrachloroethylene”, L. B. Tichenor, J. L. Graham, T. Yamada, P. H. Taylor, J. Peng, X. Hu and P. Marshall, **J. Phys. Chem. A**, 104, 1700 (2000).  
<http://digital.library.unt.edu/ark:/67531/metadc501394/>
71. “Characterization of Reaction Pathways on the Potential Energy Surfaces for H + SO<sub>2</sub> and HS + O<sub>2</sub>”, A. Goumri, J.-D. R. Rocha, D. Laakso, C. E. Smith and P. Marshall, **J. Phys. Chem. A**, 103, 11328 (1999).  
<http://digital.library.unt.edu/ark:/67531/metadc699801/>
70. “The Gas-Phase Kinetics of the Reactions of Alkali Metal Atoms with Nitric Oxide”, A. Goumri, J.-D. R. Rocha, A. Misra and P. Marshall, **J. Phys. Chem. A**, 103, 9252 (1999).  
<http://digital.library.unt.edu/ark:/67531/metadc699793/>

69. “An Ab Initio Investigation of Halocarbenes”, M. Schwartz and P. Marshall, **J. Phys. Chem. A**, 103, 7900 (1999).  
<http://digital.library.unt.edu/ark:/67531/metadc699809/>
68. “Experimental and Ab Initio Investigations of the Kinetics of the Reaction  $H + H_2S$ ”, J. Peng, X. Hu and P. Marshall, **J. Phys. Chem. A**, 103, 5307 (1999).  
<http://digital.library.unt.edu/ark:/67531/metadc699763/>
67. “The Thermochemistry of the Ethyl Radical and the C-H Bond Strength in Ethane”, P. Marshall, **J. Phys. Chem. A**, 103, 4560 (1999).  
<http://digital.library.unt.edu/ark:/67531/metadc699823/>
66. “A Computational Study of the Enthalpies of Formation of Halomethylidyne”, P. Marshall, A. Misra and M. Schwartz, **J. Chem. Phys.**, 110, 2069 (1999).  
<http://digital.library.unt.edu/ark:/67531/metadc674054/>
65. “Inhibition of Non-Premixed Hydrogen Flames by  $CF_3Br$ ”, L. Truett, H. Thermann, D. Trees, K. Seshadri, J. Yuan, L. Wells and P. Marshall, **Proc. Combust. Inst**, 27, 2741 (1998).  
<http://digital.library.unt.edu/ark:/67531/metadc725845/>
64. “Computational Study of the Kinetics of Hydrogen Abstraction from Fluoromethanes by the Hydroxyl Radical”, M. Schwartz, P. Marshall, R. J. Berry, C. J. Ehlers and G. A. Petersson, **J. Phys. Chem. A**, 102, 10074 (1998).  
<http://digital.library.unt.edu/ark:/67531/metadc699788/>
63. “Kinetic Studies of the Reaction of Atomic Hydrogen with Trifluoroiodomethane”, J. Yuan, L. Wells and P. Marshall, **Chem. Phys. Lett.**, 297, 553 (1998).  
<http://digital.library.unt.edu/ark:/67531/metadc725846/>
62. “Computational Investigations of Iodine Oxides”, A. Misra and P. Marshall, **J. Phys. Chem. A**, 102, 9056 (1998).  
<http://digital.library.unt.edu/ark:/67531/metadc699818/>
61. “Experimental and Computational Investigations of the Reaction of OH with  $CF_3I$  and the Enthalpy of Formation of HOI”, R. J. Berry, J. Yuan, A. Misra and P. Marshall, **J. Phys. Chem. A**, 102, 5182 (1998).  
<http://digital.library.unt.edu/ark:/67531/metadc699837/>
60. “A Computational Study of the Reaction Kinetics of Methyl Radicals with Trifluorohalomethanes”, R. J. Berry and P. Marshall, **Int. J. Chem. Kinet.**, 30, 179 (1998).  
<http://digital.library.unt.edu/ark:/67531/metadc725780/>
59. “Ab Initio Calculations for Kinetic Modeling of Halocarbons”, R. J. Berry, M. Schwartz and P. Marshall, in “**Computational Thermochemistry: Prediction and Estimation of Molecular Thermodynamics**” (K. K. Irikura, D. J. Frurip, Eds.; ACS Symp. Ser. 677; ACS: Washington DC, 1998) Ch. 18. (American Chemical Society)  
<http://digital.library.unt.edu/ark:/67531/metadc725801/>

58. “Potential Energy Surfaces for the Reaction of O-atoms with CH<sub>3</sub>I: Implications for Thermochemistry and Kinetics”, A. Misra, R. J. Berry and P. Marshall, **J. Phys. Chem. A**, 101, 7420 (1997).  
<http://digital.library.unt.edu/ark:/67531/metadc699785/>
57. “Computational Studies of the Isomers of ClIO and ClIO<sub>2</sub>: Implications for the Stratospheric Chemistry of Iodine”, A. Misra and P. Marshall, **J. Chem. Soc. Faraday Trans.** 93, 3301 (1997).  
<http://digital.library.unt.edu/ark:/67531/metadc505020/>
56. “Elementary Reactions and a Mechanism for the Suppression of Hydrogen Fires by CF<sub>3</sub>I”, P. Marshall, A. Misra, J. Yuan, R. Berry and A. McIlroy, **Proceedings of the 1997 Halon Options Technical Working Conference**, 262 (1997).  
<http://digital.library.unt.edu/ark:/67531/metadc699784/>
55. “Kinetic Studies of the Reactions of Atomic Hydrogen with Iodoalkanes”, J. Yuan, L. Wells and P. Marshall, **J. Phys. Chem. A**, 101, 3542 (1997).  
<http://digital.library.unt.edu/ark:/67531/metadc699804/>
54. “A Computational Study of C-H Bond Strengths in Polyfluoroalkanes”, P. Marshall and M. Schwartz, **J. Phys. Chem. A**, 101, 2906 (1997).  
<http://digital.library.unt.edu/ark:/67531/metadc699826/>
53. “A Computational Study of the Reactions of Atomic Hydrogen with Fluoromethanes: Kinetics and Product Channels”, R. J. Berry, C. J. Ehlers, D. R. Burgess, Jr., M. R. Zachariah and P. Marshall, **Chem. Phys. Lett.**, 269, 107 (1997).  
<http://digital.library.unt.edu/ark:/67531/metadc725835/>
52. “Computational Studies of the Reactions of CH<sub>3</sub>I with H and OH”, P. Marshall, A. Misra and R. J. Berry, **Chem. Phys. Lett.**, 265, 48 (1997).  
<http://digital.library.unt.edu/ark:/67531/metadc725856/>
51. “Kinetic and Mechanistic Studies of the Reaction of Hydroxyl radicals with Acetaldehyde over an Extended Temperature Range”, P. H. Taylor, M. Sm. Rahman, A. Arif, B. Dellinger and P. Marshall, **Proc. Combust. Inst.**, 26, 497 (1996).  
<http://digital.library.unt.edu/ark:/67531/metadc725778/>
50. “Laser-Induced Fluorescence and Mass-Spectrometric Studies of the Cu + HCl Reaction over a Wide Temperature Range. Formation of HCuCl”, D. P. Belyung, J. Hranisavljevic, O. E. Kashireninov, G. M. Santana, A. Fontijn and P. Marshall, **J. Phys. Chem.**, 100, 17835 (1996).  
<http://digital.library.unt.edu/ark:/67531/metadc699772/>
49. “Ab Initio Calculations and Kinetics Modeling of Halon and Halon Replacements”, H.L. Paige, R. J. Berry, M. Schwartz, P. Marshall, D. R. F. Burgess and M. R. Nyden, **Proceedings of the 1996 Halon Options Technical Working Conference**, 259-270 (1996).  
<http://digital.library.unt.edu/ark:/67531/metadc505002/>

48. "The Positions of  $\lambda_{\max}$  for some Trimethylsilyl-Substituted Silylenes", S. G. Bott, P. Marshall, P. E. Wagenseller, Y. Yang and R. T. Conlin, **J. Organomet. Chem.**, 499, 11 (1995).
47. "Collision-Induced Interaction Cross Sections of 1-7 MeV B<sub>2</sub> Ions Incident on an N<sub>2</sub> Gas Target", Y. D. Kim, J. Y. Jin, S. Matteson, D. L. Weathers, J. M. Anthony, P. Marshall and F. D. McDaniel, **Nucl. Instrum. Methods Phys. Res. B**, 99, 82 (1995).
46. "The Kinetics of the Recombination Reaction SH + O<sub>2</sub> + Ar: Implications for the Formation and Loss of HSOO and SOO in the Atmosphere", A. Goumri, J.-D. R. Rocha and P. Marshall, **J. Phys. Chem.**, 99, 10834 (1995).  
<http://digital.library.unt.edu/ark:/67531/metadc503260/>
45. "Computational Studies of the Potential Energy Surface for O(<sup>3</sup>P) + H<sub>2</sub>S: Characterization of Transition States and the Enthalpy of Formation of HSO and HOS", A. Goumri, D. Laakso, J.-D. R. Rocha, C. E. Smith and P. Marshall, **J. Chem. Phys.**, 102, 161 (1995).  
<http://digital.library.unt.edu/ark:/67531/metadc505015/>
44. "Computational Studies of the Potential Energy Surface for O(<sup>1</sup>D) + H<sub>2</sub>S: Characterization of Pathways Involving H<sub>2</sub>SO, HOSH and H<sub>2</sub>OS", A. Goumri, J.-D. R. Rocha, D. Laakso, C. E. Smith and P. Marshall, **J. Chem. Phys.**, 101, 9405 (1994).  
<http://digital.library.unt.edu/ark:/67531/metadc505005/>
43. "Theoretical Studies of Reactions of Silanes", P. Marshall, **J. Mol. Struct. (Theochem)**, 313, 19 (1994).  
<http://digital.library.unt.edu/ark:/67531/metadc725850/>
42. "Theoretical Studies of the RSOO, ROSO, RSO<sub>2</sub> and HOOS (R = H, CH<sub>3</sub>) Radicals", D. Laakso, C. E. Smith, A. Goumri, J.-D. R. Rocha and P. Marshall, **Chem. Phys. Lett.**, 227, 377 (1994).  
<http://digital.library.unt.edu/ark:/67531/metadc725832/>
41. "Kinetics and Thermochemistry of the Reaction Si(CH<sub>3</sub>)<sub>3</sub> + HBr = Si(CH<sub>3</sub>)<sub>3</sub>H + Br: Determination of the (CH<sub>3</sub>)<sub>3</sub>Si-H Bond Energy", I. J. Kalinovski, D. Gutman, L. N. Krasnoperov, A. Goumri, W.-J. Yuan and P. Marshall, **J. Phys. Chem.**, 98, 9551 (1994).  
<http://digital.library.unt.edu/ark:/67531/metadc503272/>
40. "An Investigation of Donor-Acceptor Bonding between Amines and Silylenes", R. T. Conlin, D. Laakso and P. Marshall, **Organometallics**, 13, 838 (1994).  
<http://digital.library.unt.edu/ark:/67531/metadc505007/>
39. "Investigations of the Reaction of Trimethylsilane with O(<sup>3</sup>P) Atoms", A. Misra, L. Ding, P. Marshall, C. Buchta, D.-V. Stucken, J.-T. Vollmer and H. Gg. Wagner, **J. Phys. Chem.**, 98, 4020 (1994).  
<http://digital.library.unt.edu/ark:/67531/metadc503252/>

38. "A Computational Investigation of the Molecular Geometry and Rotational Barriers in Ethylmethyl Ether", C. L. Stanton, P. Marshall and M. Schwartz, **J. Mol. Struct. (Theochem)**, 288, 215 (1993).  
<http://digital.library.unt.edu/ark:/67531/metadc725788/>
37. "Experimental and Theoretical Studies of the Reaction of Atomic Hydrogen with Silane", A. Goumri, W.-J. Yuan, L. Ding, Y. Shi and P. Marshall, **Chem. Phys.**, 177, 233 (1993).  
<http://digital.library.unt.edu/ark:/67531/metadc725812/>
36. "An Investigation of the Gas-Phase Kinetics of the Reaction  $K + SO_2 + Ar$ ", A. Goumri, D. Laakso, J.-D. R. Rocha, E. Francis and P. Marshall, **J. Phys. Chem.**, 97, 5295 (1993).  
<http://digital.library.unt.edu/ark:/67531/metadc503247/>
35. "Experimental and Theoretical Studies of the Reaction of Atomic Oxygen with Silane", L. Ding and P. Marshall, **J. Chem. Phys.**, 98, 8545 (1993).  
<http://digital.library.unt.edu/ark:/67531/metadc699776/>
34. "A Discharge-Flow/Chemiluminescence Study of the Reaction  $O + Si_2H_6$  at Room Temperature", C. A. Taylor and P. Marshall, **Chem. Phys. Lett.**, 205, 493 (1993).  
<http://digital.library.unt.edu/ark:/67531/metadc725798/>
33. "An Investigation of the Gas-Phase Reaction of Trimethylsilyl Radicals with HBr: Measurement of the  $(CH_3)_3Si-H$  Bond Strength", A. Goumri, W.-J. Yuan and P. Marshall, **J. Amer. Chem. Soc.**, 115, 2539 (1993).  
<http://digital.library.unt.edu/ark:/67531/metadc505025/>
32. "The Kinetics of the Reaction of Atomic Oxygen with Tetramethylsilane", L. Ding and P. Marshall, **J. Phys. Chem.**, 97, 3758 (1993).  
<http://digital.library.unt.edu/ark:/67531/metadc503236/>
31. "Gas-Phase Reactions between Hydrocarbons and Metal Oxides. The  $AlO + CH_4$  Reaction from 590 to 1380 K", D. P. Belyung, A. Fontijn and P. Marshall, **J. Phys. Chem.**, 97, 3456 (1993).  
<http://digital.library.unt.edu/ark:/67531/metadc503267/>
30. "An Investigation of the Gas-Phase Reaction of Atomic Bromine with Disilane: Implications for the  $Si_2H_5-H$  Bond Strength", A. Goumri, W.-J. Yuan, L. Ding and P. Marshall, **Chem. Phys. Lett.**, 204, 296 (1993).  
<http://digital.library.unt.edu/ark:/67531/metadc725797/>
29. "Discharge-Flow/Chemiluminescence and Flash-Photolysis/Resonance Fluorescence Studies of the Reaction  $O + SiH_4$  at Room Temperature", C. A. Taylor, L. Ding and P. Marshall, **Int. J. Chem. Kinet.**, 25, 183 (1993).  
<http://digital.library.unt.edu/ark:/67531/metadc725859/>

28. "Kinetic Studies of the Reactions of Atomic Bromine with Methylsilane and Dimethylsilane and Ab Initio Investigations", L. Ding and P. Marshall, **J. Chem. Soc. Faraday Trans.**, 89, 419 (1993).  
<http://digital.library.unt.edu/ark:/67531/metadc503246/>
27. "A Theoretical Study of Nitrososilane and Six Isomers of SiH<sub>3</sub>NO", P. Marshall, **Chem. Phys. Lett.**, 201, 493 (1993).  
<http://digital.library.unt.edu/ark:/67531/metadc725830/>
26. "Reactions of Boron and Aluminum Atoms with Small Molecules", P. Marshall, P. B. O'Connor, W.-T. Chan, P. V. Kristof and J. D. Goddard, in "**Gas-Phase Metal Reactions**" (A. Fontijn, Editor; North Holland, Amsterdam, 1992) Ch. 8.  
<http://digital.library.unt.edu/ark:/67531/metadc725857/>
25. "Does Alkyl Substitution Affect the Si-H Bond Strength in Silane? Kinetic Studies of the Reactions of Atomic Chlorine and Bromine with Trimethylsilane and an Ab Initio Investigation", L. Ding and P. Marshall, **J. Amer. Chem. Soc.**, 114, 5754 (1992).  
<http://digital.library.unt.edu/ark:/67531/metadc505010/>
24. "An Ab Initio Study of Sulfinic Acid and Related Species", D. Laakso and P. Marshall, **J. Phys. Chem.**, 96, 2471 (1992).  
<http://digital.library.unt.edu/ark:/67531/metadc503242/>
23. "Kinetic Studies of the Reactions of Atomic Chlorine and Bromine with Silane", L. Ding and P. Marshall, **J. Phys. Chem.**, 96, 2197 (1992).  
<http://digital.library.unt.edu/ark:/67531/metadc503273/>
22. "An Ab Initio Study of the Ionization of Sodium Superoxide", P. Marshall, **J. Chem. Phys.**, 95, 7773 (1991).  
<http://digital.library.unt.edu/ark:/67531/metadc699771/>
21. "A Computational Study of Adducts between Atomic Chlorine and Carbon Dioxide, Carbonyl Sulfide and Carbon Disulfide", P. Marshall, **J. Mol. Struct. (Theochem)**, 236, 309 (1991).  
<http://digital.library.unt.edu/ark:/67531/metadc725816/>
20. "An Ab Initio Study of the Reaction of Atomic Hydrogen with Sulfur Dioxide", D. Binns and P. Marshall, **J. Chem. Phys.**, 95, 4940 (1991).  
<http://digital.library.unt.edu/ark:/67531/metadc699787/>
19. "A Kinetic Study of the Recombination Reaction Na + SO<sub>2</sub> + Ar", Y. Shi and P. Marshall, **J. Phys. Chem.**, 95, 1654 (1991).  
<http://digital.library.unt.edu/ark:/67531/metadc503254/>
18. "Kinetic and Thermochemical Studies of the Recombination Reaction Na + O<sub>2</sub> + N<sub>2</sub> from 590 to 1515 K by a Modified High-Temperature Photochemistry Technique", P. Marshall, A. S. Narayan and A. Fontijn, **J. Phys. Chem.**, 94, 2998 (1990).  
<http://digital.library.unt.edu/ark:/67531/metadc503270/>

17. "Rate Coefficients for the H + NH<sub>3</sub> Reaction over a Wide Temperature Range", T. Ko, P. Marshall and A. Fontijn, **J. Phys. Chem.**, 94, 1401 (1990).  
<http://digital.library.unt.edu/ark:/67531/metadc503262/>
16. "High-Temperature Photochemistry (HTP) Studies of the Reactions of H(1<sup>2</sup>S) and D(1<sup>2</sup>S) with N<sub>2</sub>O", P. Marshall, T. Ko and A. Fontijn, **J. Phys. Chem.**, 93, 1922 (1989).  
<http://digital.library.unt.edu/ark:/67531/metadc503257/>
15. "High-Temperature Fast-Flow Reactor Kinetics Studies: Al + Cl<sub>2</sub> → AlCl + Cl, Al + HCl → AlCl + H, and AlCl + Cl<sub>2</sub> → AlCl<sub>2</sub> + Cl", D. F. Rogowski, P. Marshall and A. Fontijn, **J. Phys. Chem.**, 93, 1118 (1989).  
<http://digital.library.unt.edu/ark:/67531/metadc503269/>
14. "The Reaction of O(<sup>3</sup>P) Atoms with Ethane: an HTP Kinetics Study from 300 to 1270 K", K. Mahmud, P. Marshall and A. Fontijn, **J. Chem. Phys.**, 88, 2393 (1988).  
<http://digital.library.unt.edu/ark:/67531/metadc674102/>
13. "HTP Kinetics Studies of the Reaction of O(2<sup>3</sup>P<sub>J</sub>) Atoms with H<sub>2</sub> and D<sub>2</sub> over Wide Temperature Ranges", P. Marshall and A. Fontijn, **J. Chem. Phys.**, 87, 6988 (1987).  
<http://digital.library.unt.edu/ark:/67531/metadc699783/>
12. "A High-Temperature Photochemistry (HTP) Study of the D + ND<sub>3</sub> Reaction", P. Marshall and A. Fontijn, **J. Phys. Chem.**, 91, 6297 (1987).  
<http://digital.library.unt.edu/ark:/67531/metadc503223/>
11. "A Method for Analyzing Exponential Decays", P. Marshall, **Comput. Chem.**, 11, 219 (1987).
10. "Temperature Dependence of the Absolute Third-Order Rate Constant for the Reaction between K + O<sub>2</sub> + N<sub>2</sub> over the Range 680-1010 K Studied by Time-Resolved Atomic Resonance Absorption Spectroscopy", D. Husain, Y. H. Lee and P. Marshall, **Combust. Flame**, 68, 143 (1987).
9. "High-Temperature Photochemistry and BAC-MP4 Studies of the Reaction between Ground-State H Atoms and N<sub>2</sub>O", P. Marshall, A. Fontijn and C.F. Melius, **J. Chem. Phys.**, 86, 5540 (1987).  
<http://digital.library.unt.edu/ark:/67531/metadc699781/>
8. "A High-Temperature Photochemistry Kinetics Study of the Reaction of O(<sup>3</sup>P) Atoms with Ethylene from 290 to 1510 K", K. Mahmud, P. Marshall and A. Fontijn, **J. Phys. Chem.**, 91, 1568 (1987).  
<http://digital.library.unt.edu/ark:/67531/metadc503248/>
7. "An HTP Kinetics Study of the Reaction between Ground-State H Atoms and NH<sub>3</sub> from 500 to 1140 K", P. Marshall and A. Fontijn, **J. Chem. Phys.**, 85, 2637 (1986).  
<http://digital.library.unt.edu/ark:/67531/metadc505009/>

6. "Determination of Absolute Rate Data for the Reaction of Atomic Sodium,  $\text{Na}(3^2\text{S}_2)$ , with  $\text{CH}_3\text{F}$ ,  $\text{CH}_3\text{Cl}$ ,  $\text{CH}_3\text{Br}$ ,  $\text{HCl}$  and  $\text{HBr}$  as a Function of Temperature by Time-Resolved Atomic Resonance Spectroscopy", D. Husain and P. Marshall, **Int. J. Chem. Kinet.**, 18, 83 (1986).
5. "Rate Constant for the Reaction  $\text{Na} + \text{O}_2 + \text{N}_2 \rightarrow \text{NaO}_2 + \text{N}_2$  under Mesospheric Conditions", D. Husain, P. Marshall and J. M. C. Plane, **J. Photochem.**, 32, 1 (1986).  
<http://digital.library.unt.edu/ark:/67531/metadc488152/>
4. "Determination of the Absolute Second-Order Rate Constant for the Reaction  $\text{Na} + \text{O}_3 \rightarrow \text{NaO} + \text{O}_2$ ", D. Husain, P. Marshall and J. M. C. Plane, **J. Chem. Soc., Chem. Commun.**, 1216 (1985).  
<http://digital.library.unt.edu/ark:/67531/metadc488151/>
3. "Kinetic Study of the Absolute Rate Constant for the Reaction between  $\text{Na} + \text{N}_2\text{O}$  in the Temperature Range 349-917 K by Time-Resolved Atomic Resonance Absorption Spectroscopy at  $\lambda = 589 \text{ nm}$  [ $\text{Na}(3^2\text{P}_j) - \text{Na}(3^2\text{S}_2)$ ] Following Pulsed Irradiation", D. Husain and P. Marshall, **Comb. Flame**, 60, 81 (1985).
2. "Determination of Absolute Rate Data for the Reaction of Atomic Sodium,  $\text{Na}(3^2\text{S}_2)$ , with  $\text{CF}_3\text{Cl}$ ,  $\text{CF}_2\text{Cl}_2$ ,  $\text{CFCl}_3$ ,  $\text{CF}_3\text{Br}$  and  $\text{SF}_6$  as a Function of Temperature by Time-Resolved Resonance Absorption Spectroscopy at  $\lambda = 589 \text{ nm}$  [ $\text{Na}(3^2\text{P}_j) - \text{Na}(3^2\text{S}_2)$ ]", D. Husain and P. Marshall, **J. Chem. Soc. Faraday Trans. 2**, 81, 613 (1985).  
<http://digital.library.unt.edu/ark:/67531/metadc503268/>
1. "Temperature Dependence of the Absolute Third-Order Rate Constant for the Reaction between  $\text{Na} + \text{O}_2 + \text{N}_2$  over the Range 571-1016 K Studied by Time-Resolved Atomic Resonance Absorption Spectroscopy", D. Husain, P. Marshall and J. M. C. Plane, **J. Chem. Soc. Faraday Trans. 2**, 81, 301 (1985).  
<http://digital.library.unt.edu/ark:/67531/metadc488174/>