Dynamics of Radical Reactions with Polyatomic Hydrocarbons: A Molecular Photography

Armando D. Estillore and Arthur G. Suits Department of Chemistry, Wayne State University 5101 Cass Ave., Detroit, MI 48202, USA

We present the results obtained in our continued efforts in understanding the dynamics of radical reactions with polyatomic hydrocarbons with different functionalities such as pentane isomers, selectively deuterated alkanes, and alkenes, studied by crossed-beam dc slice imaging methods. The product alkyl radicals are probed using single photon ionization at 157 nm yielding the product-flux velocity contour maps following 164a