

SUPPLEMENTARY MATERIAL

Generation and Rearrangement of (1-Hydroxycyclopropyl)- and (1-Hydroxycyclobutyl)carbene

Joseph D. DeAngelo,^A Sayaka Hatano,^{B, C} and Dasan M. Thamattoor^{A, C}

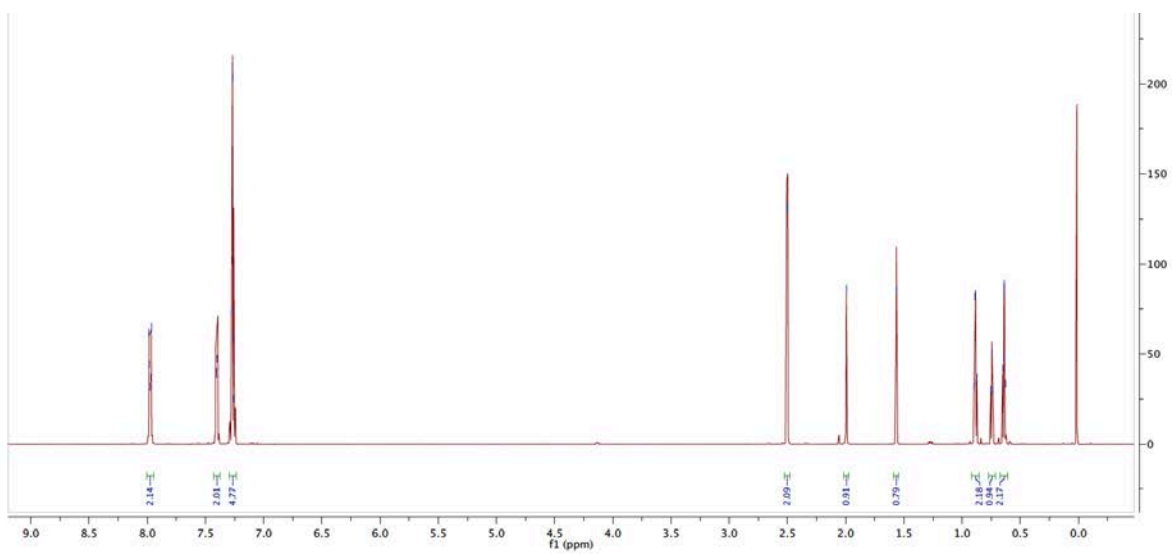
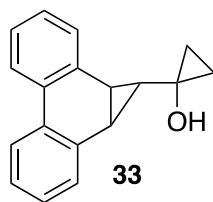
^ADepartment of Chemistry, Colby College, Waterville, ME 04901, USA

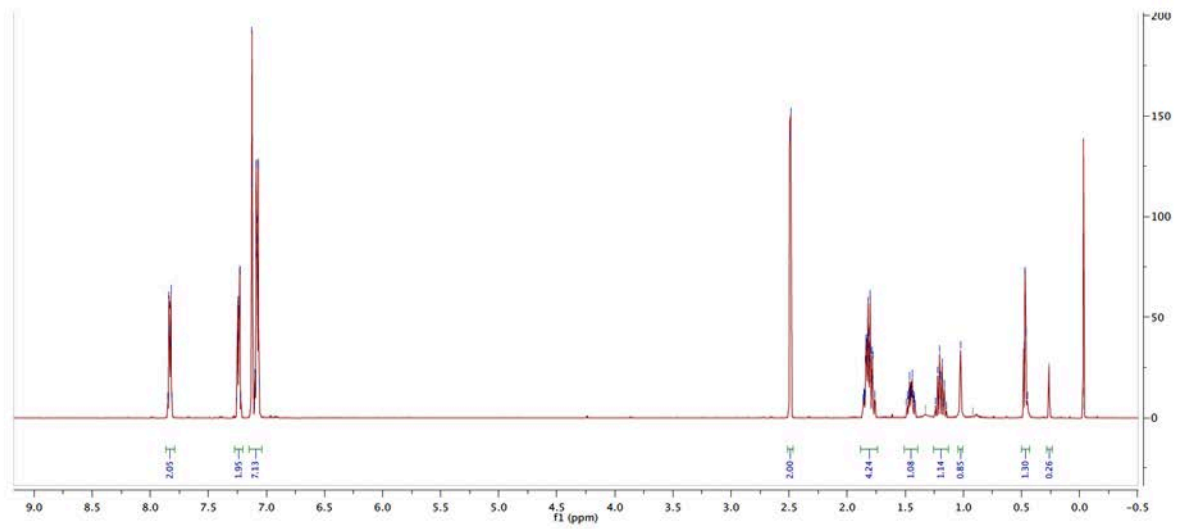
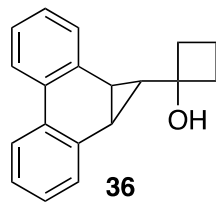
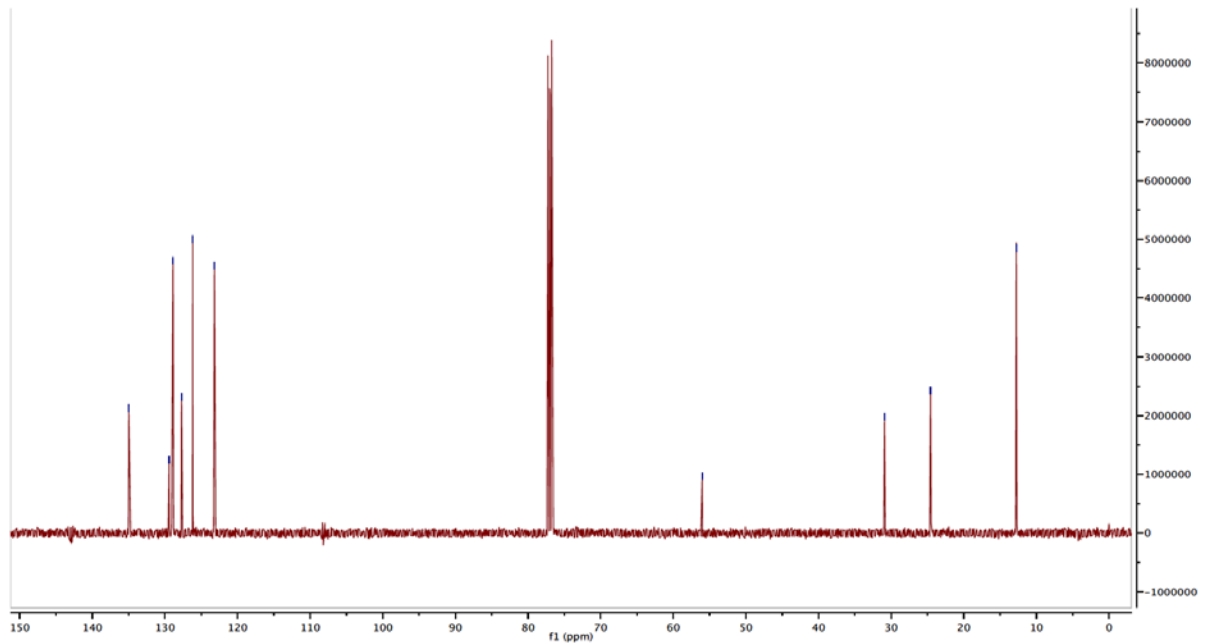
^BDepartment of Chemistry, Graduate School of Science, Hiroshima University, 1-3-1 Kagamiyama, Higashi-Hiroshima, Hiroshima, 739-8526 Japan

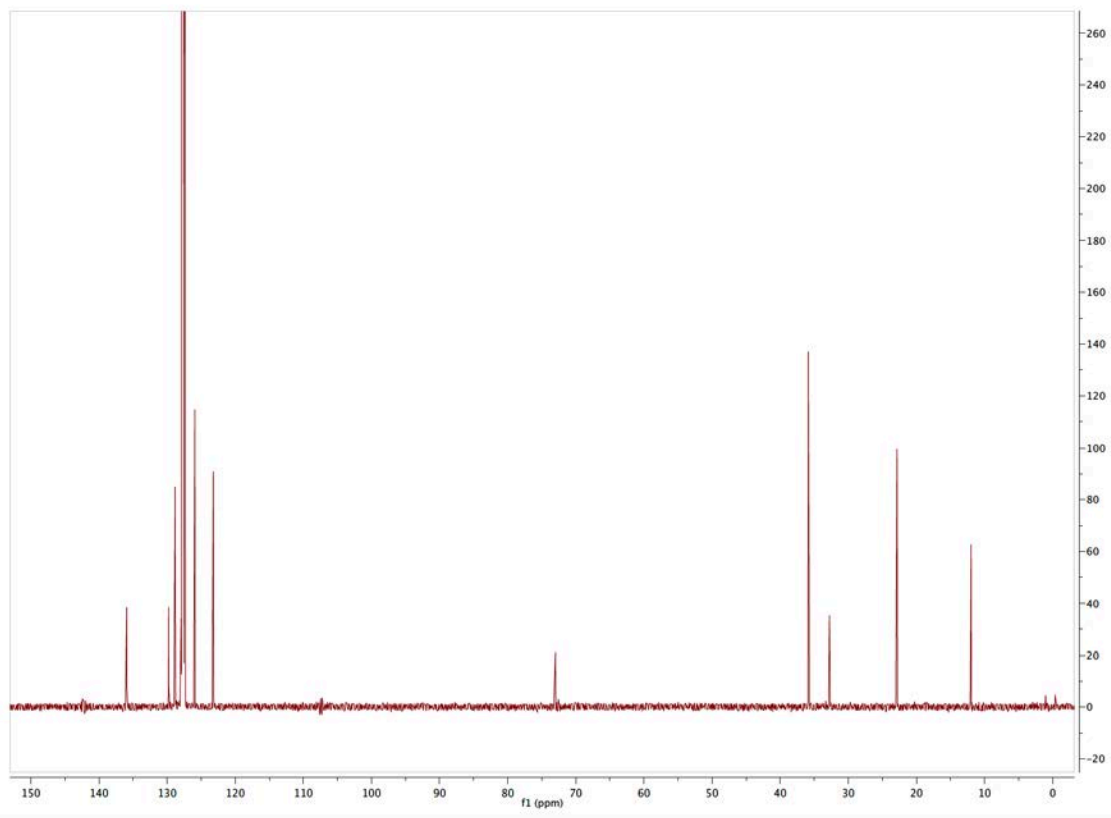
^CCorresponding authors. Email: sa-hatano@hiroshima-u.ac.jp; dmthamat@colby.edu

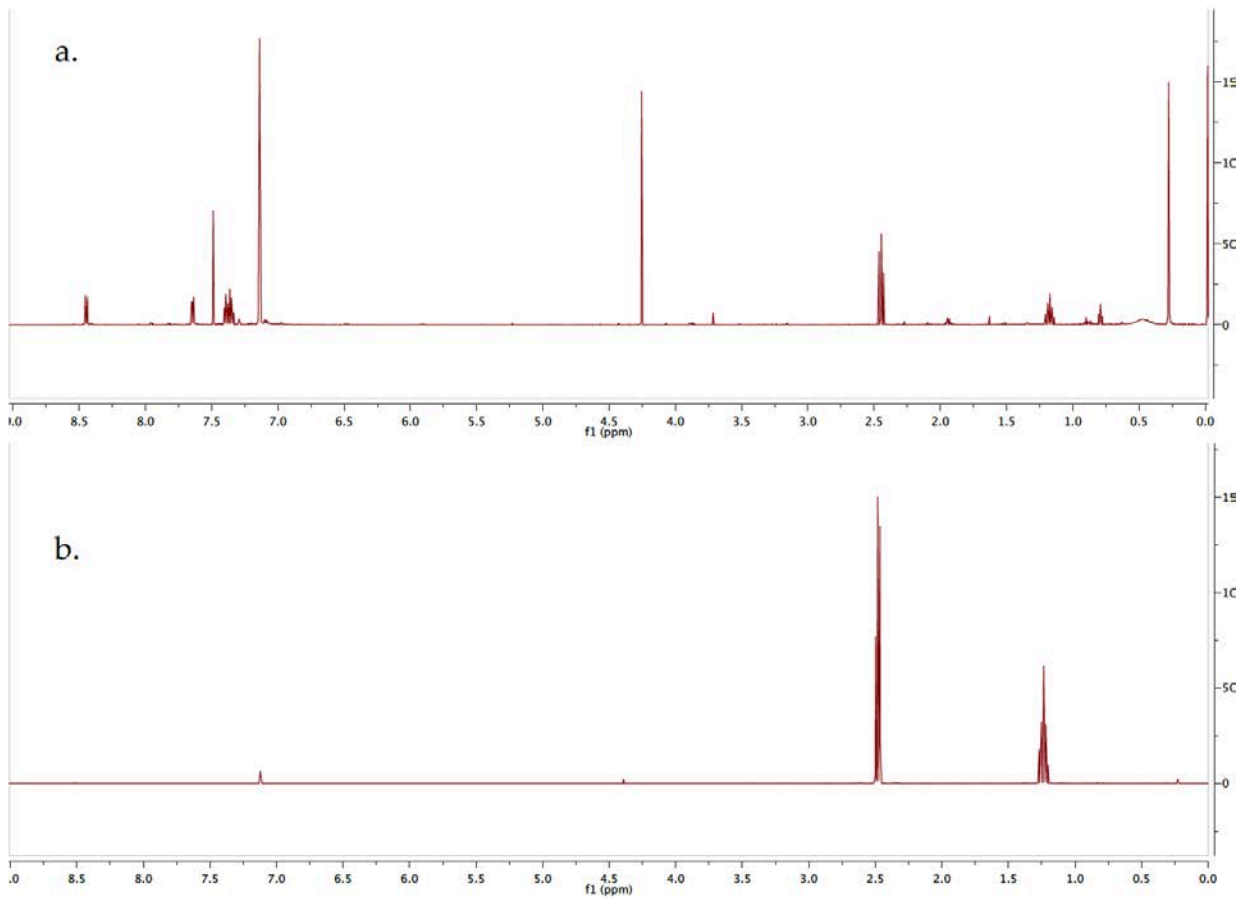
Table of Contents

(1) ¹ H and ¹³ C NMR of <i>exo</i> -1-(1 <i>a</i> ,9 <i>b</i> -dihydro-1 <i>H</i> -cyclopropa[<i>l</i>]phenanthren-1-yl)cyclopropan-1-ol	S2
(2) ¹ H and ¹³ C NMR of <i>exo</i> -1-(1 <i>a</i> ,9 <i>b</i> -dihydro-1 <i>H</i> -cyclopropa[<i>l</i>]phenanthren-1-yl)cyclobutan-1-ol	S3
(3) Photolysis of <i>exo</i> -1-(1 <i>a</i> ,9 <i>b</i> -dihydro-1 <i>H</i> -cyclopropa[<i>l</i>]phenanthren-1-yl)cyclopropan-1-ol (32)	S4
(4) Photolysis of <i>exo</i> -1-(1 <i>a</i> ,9 <i>b</i> -dihydro-1 <i>H</i> -cyclopropa[<i>l</i>]phenanthren-1-yl)cyclobutan-1-ol (35)	S5

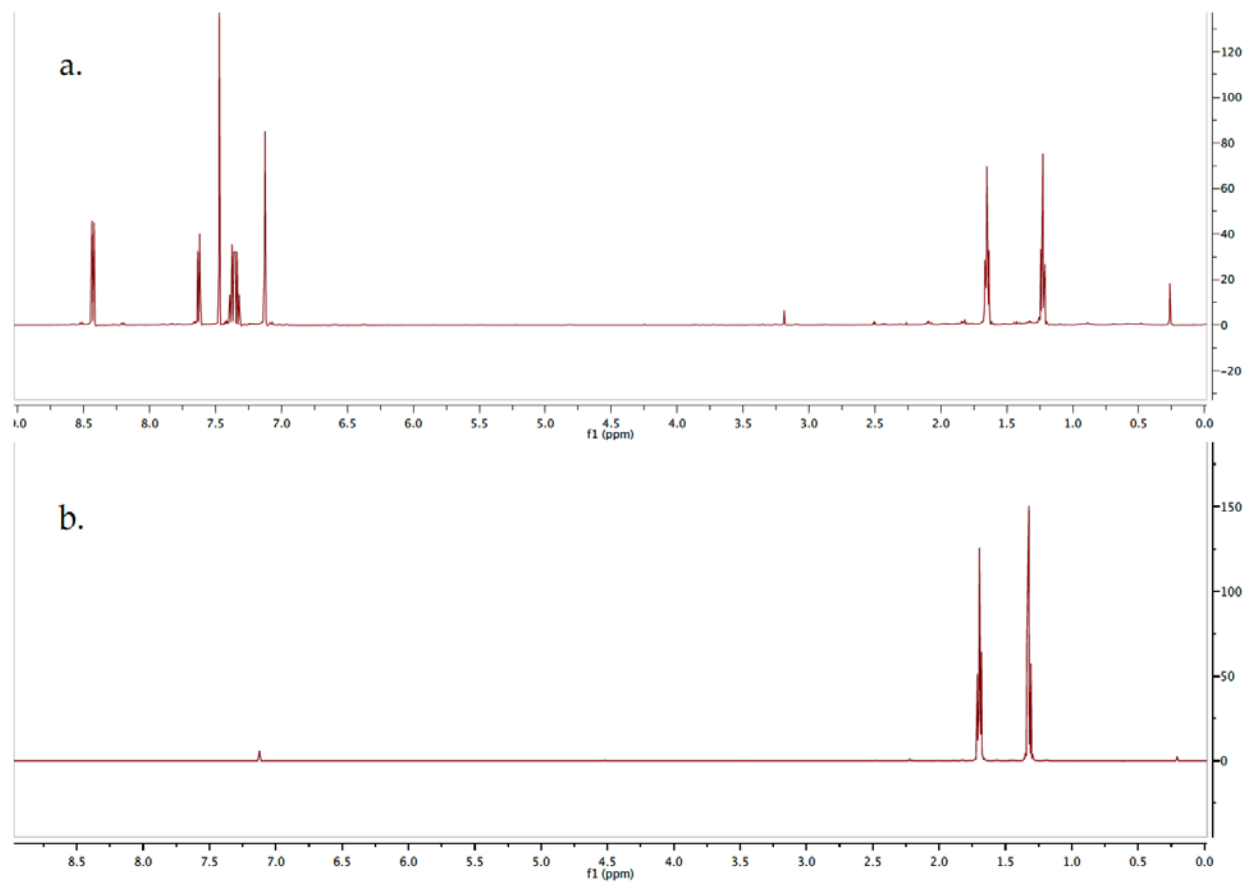








^1H NMR of **32** following 1 hour of photolysis (a) compared to an authentic standard of cyclobutanone **37** (b).



^1H NMR of **35** following 2 hour of photolysis (a) compared to an authentic standard of cyclopentanone **41** (b).