

Palladium catalyzed oxidation of terpenes with molecular oxygen: oxidation of α -bisabolol under chloride-free conditions

Luciana A. Parreira,^{a,b} Luciano Menini,^c and Elena V. Gusevskaya^{a*}

^a *Departamento de Química, Universidade Federal de Minas Gerais, 31270-901, Belo Horizonte, MG, Brazil, Fax: (+55)-31-3409-5700; phone (+55)-31-3409-5741; e-mail: elena@ufmg.br*

^b *Departamento de Química e Física, Campus de Alegre – CCA, Universidade Federal do Espírito Santo, 29500-000 Caixa Postal 16, Alegre, ES, Brazil*

^c *Campus de Alegre Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo, 29500-000 Caixa Postal 47, Alegre, ES, Brazil*

Supplementary Information

Table of contents

Product characterization data -----S2-S6

Product characterization data

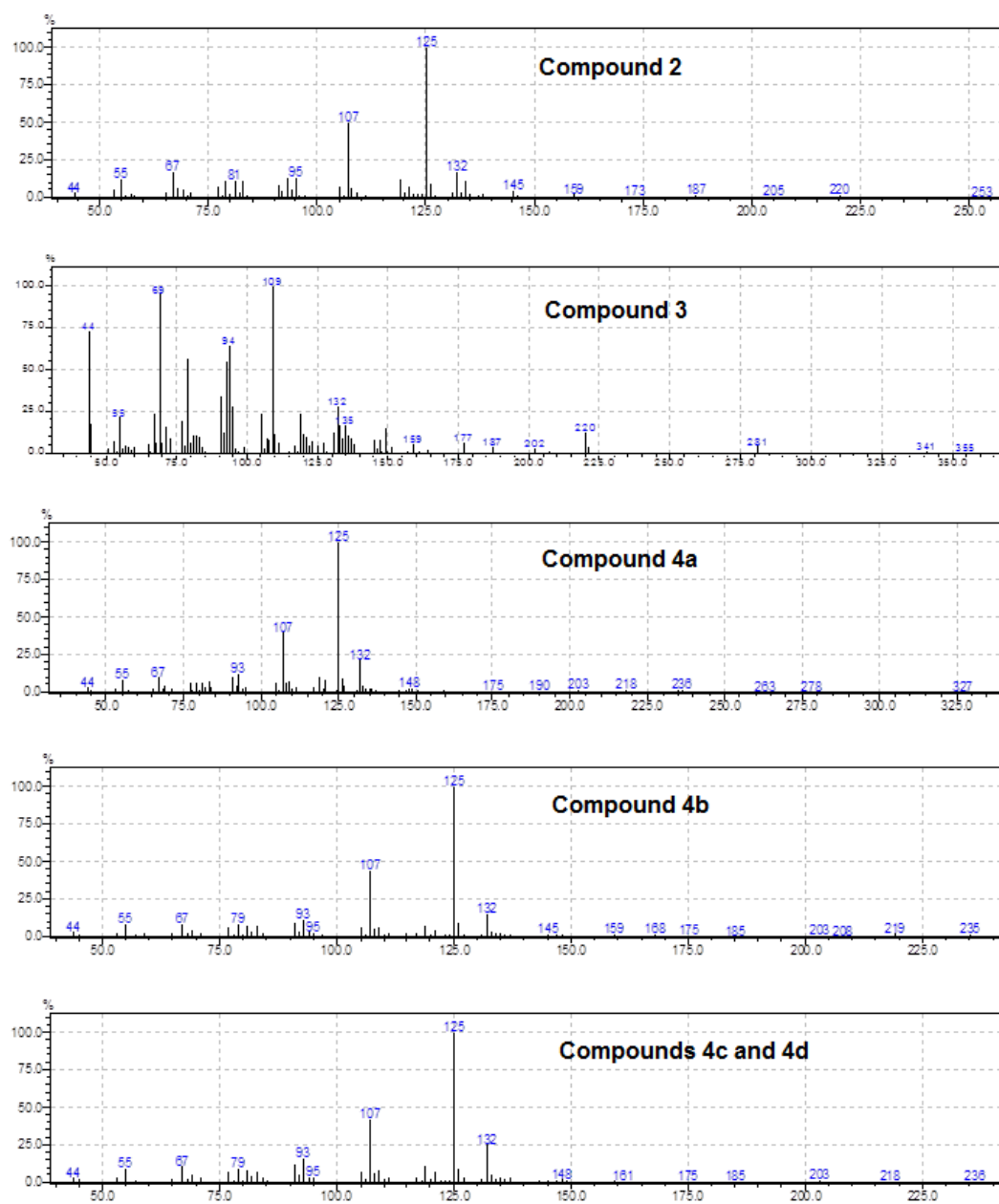


Fig. S1. Mass spectra of compounds **2**, **3**, **4a**, **4b** and **4c** and **4d** (the structures are shown in Figures 2–5).

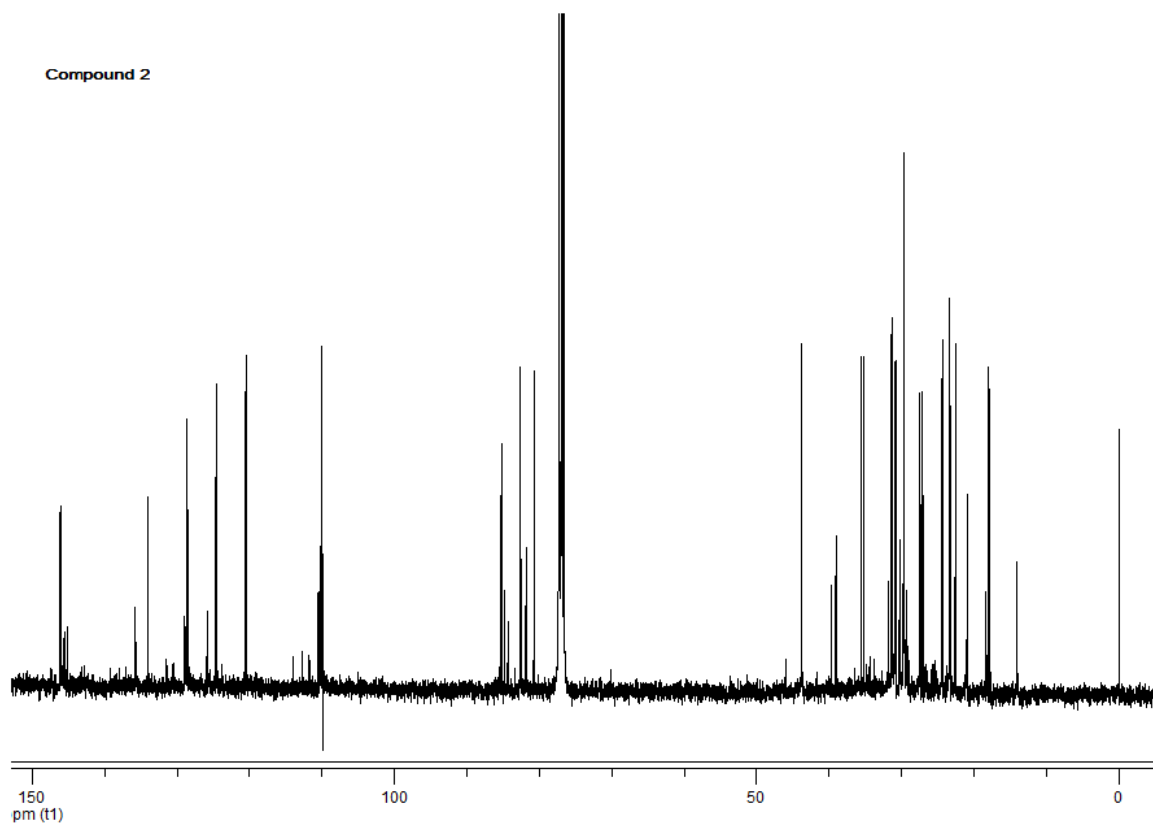
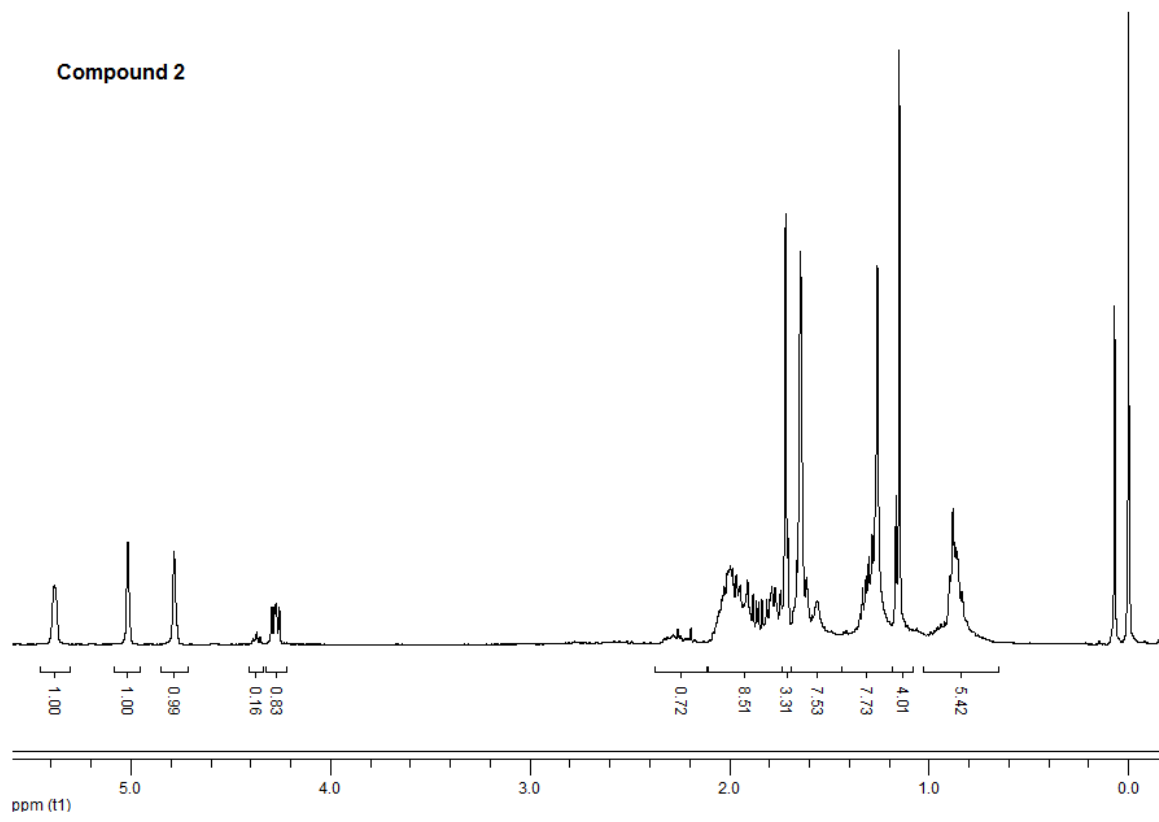
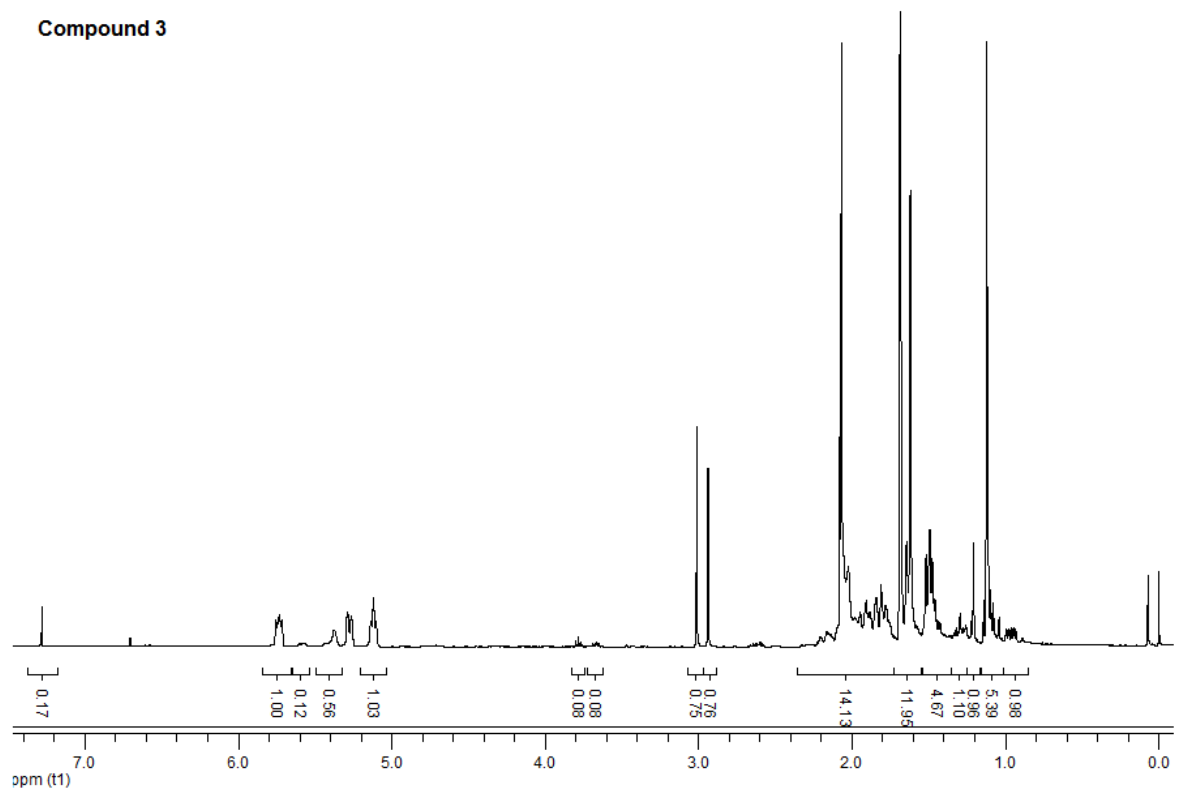


Fig. S2. ^1H and ^{13}C spectra of compound 2

Compound 3



Compound 3

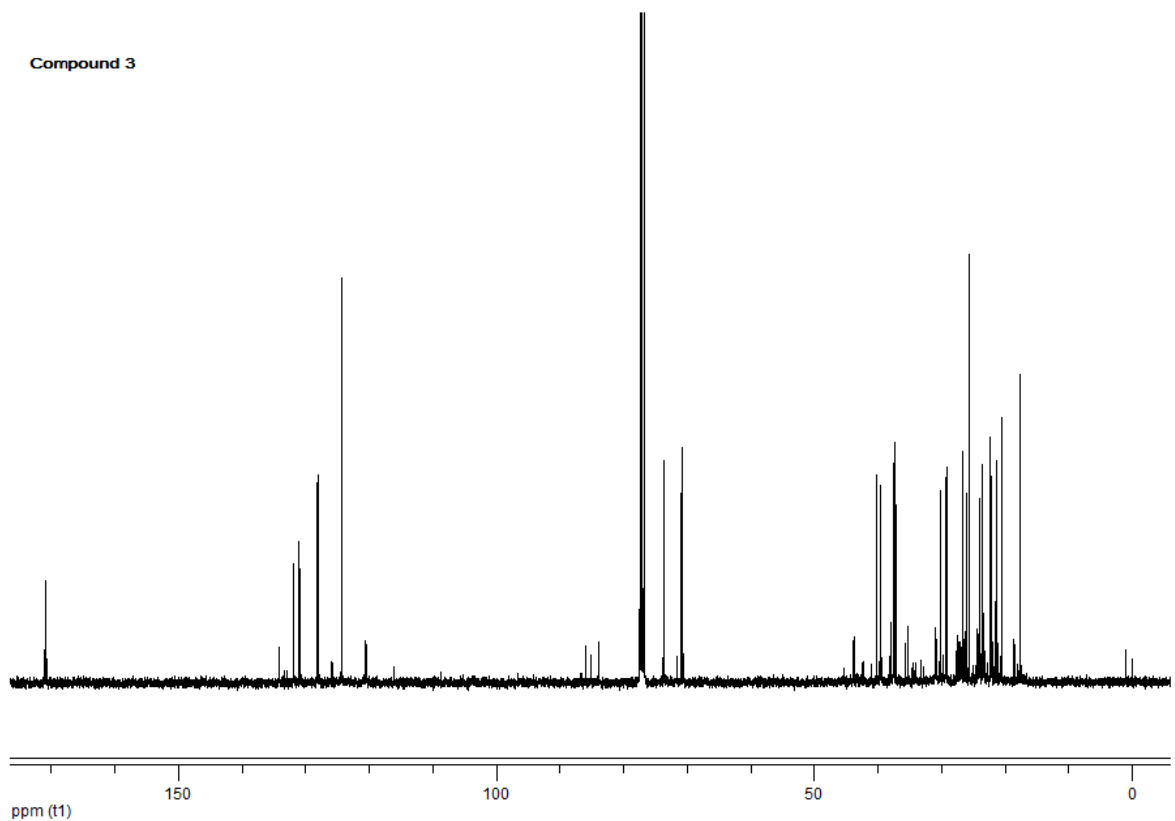
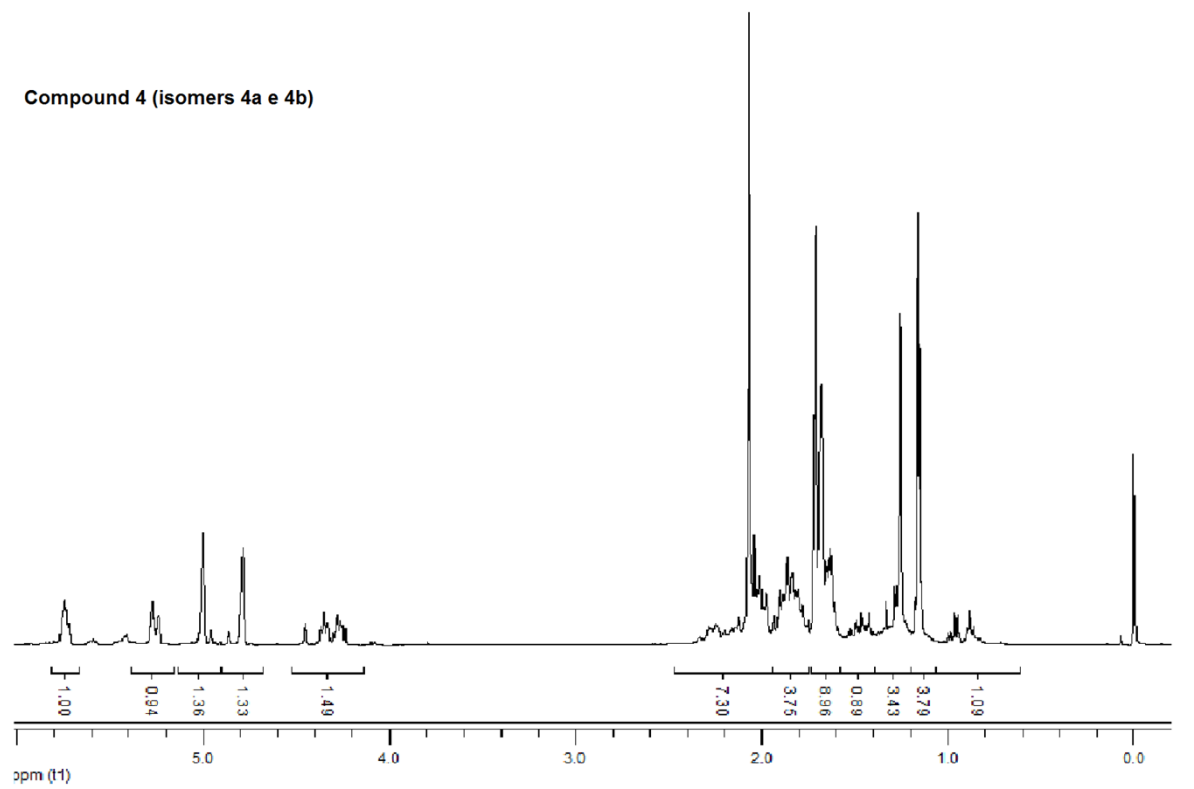


Fig. S3. ¹H and ¹³C spectra of compound 3

Compound 4 (isomers 4a e 4b)



Compound 4 (isomers 4a e 4b)

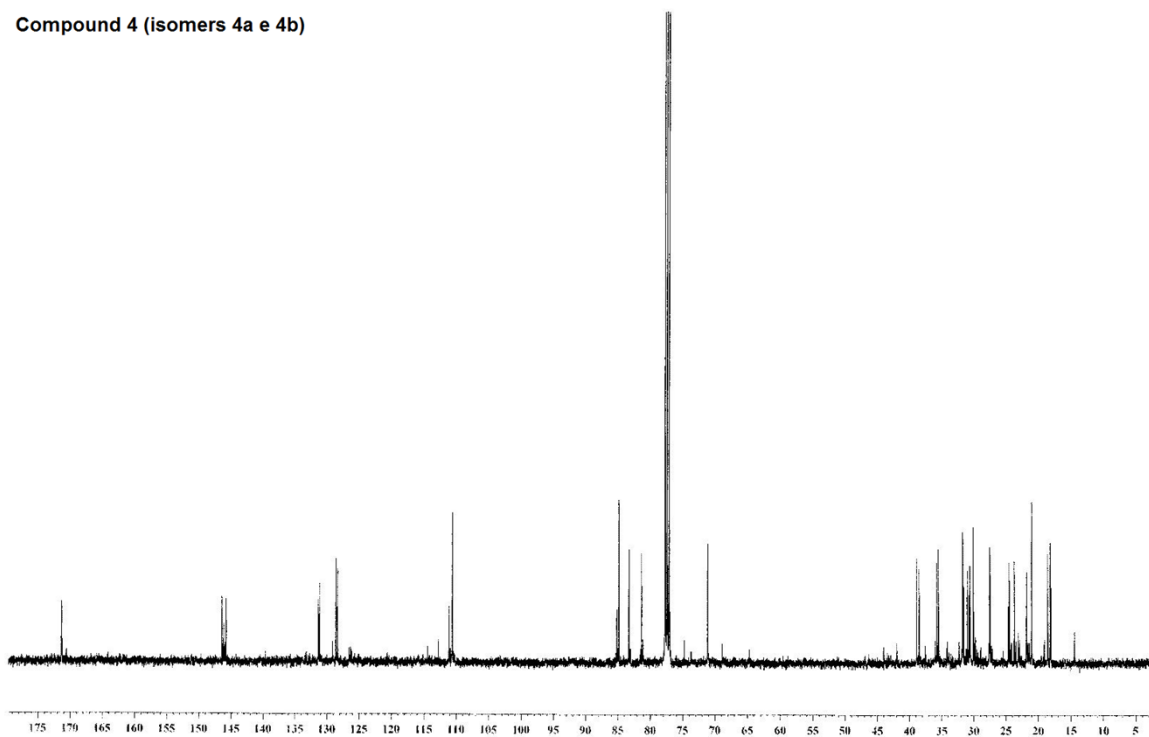


Fig. S4. ^1H and ^{13}C spectra of compound 4 (the solution contains isomers 4a and 4b).

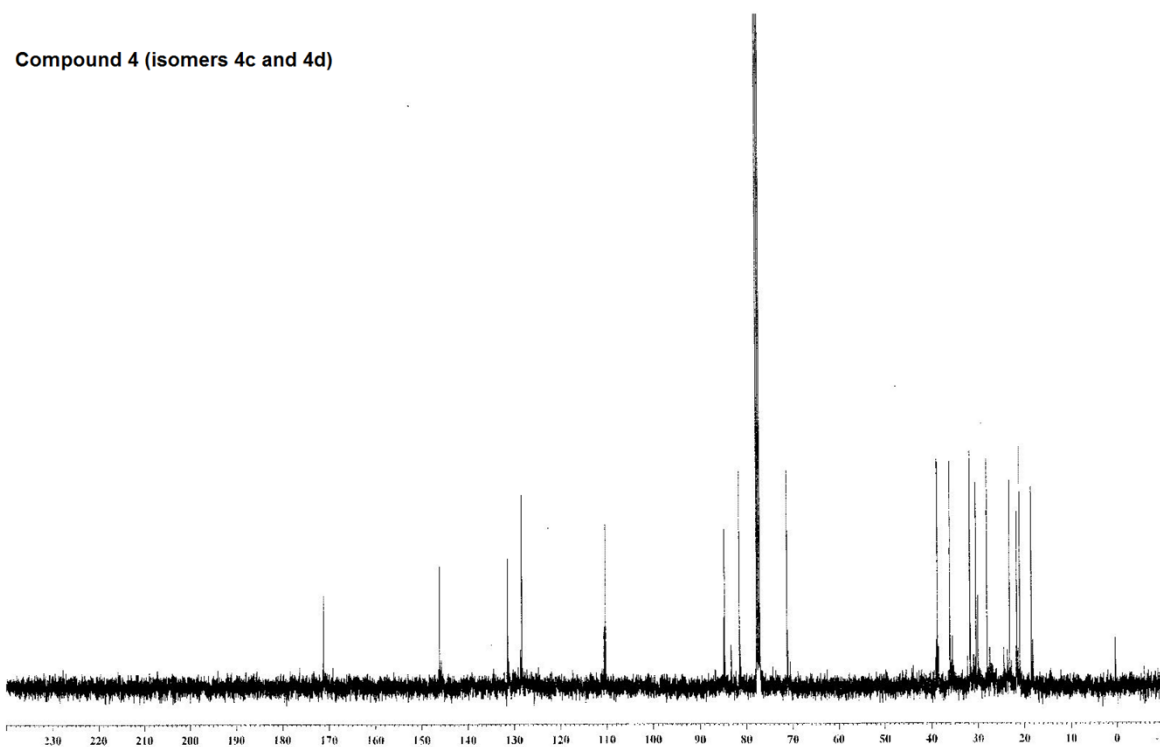
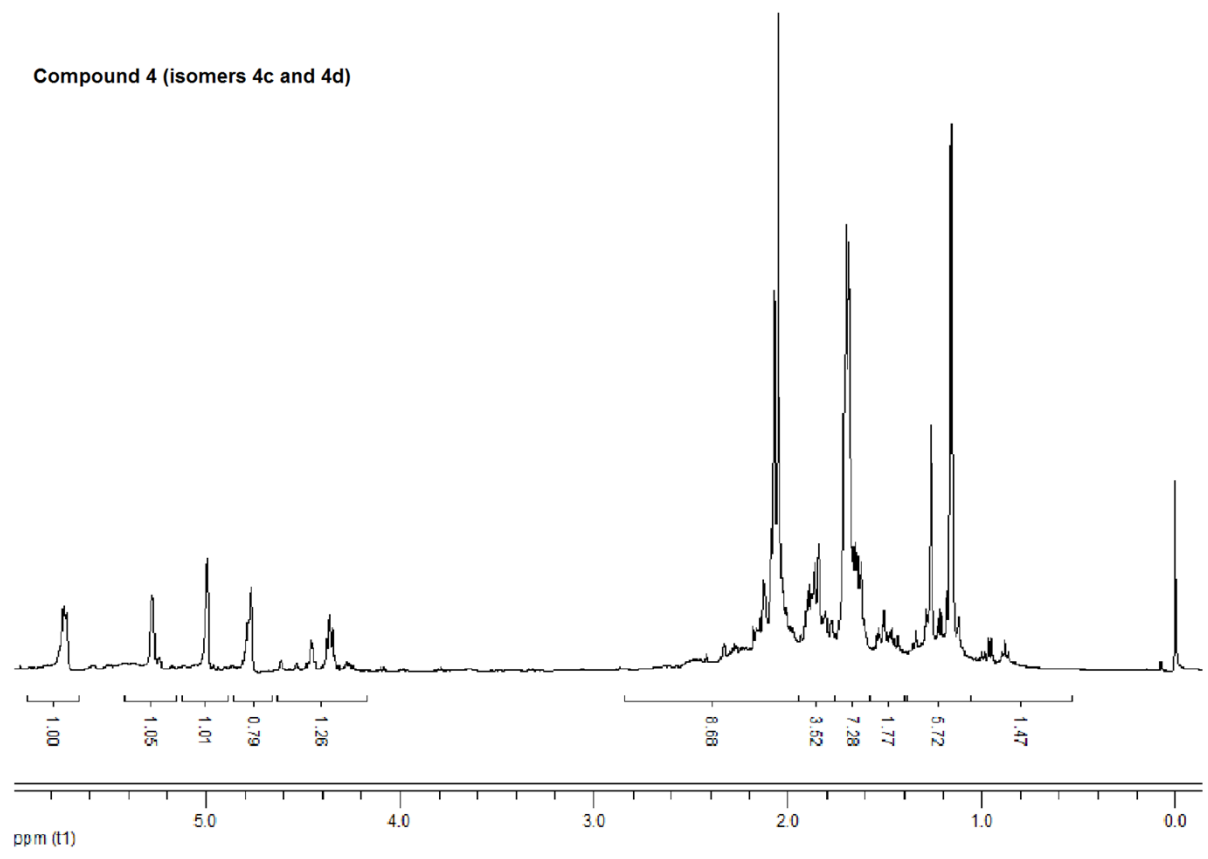


Fig. S5. ^1H and ^{13}C spectra of compound **4** (the solution contains isomers **4c** and **4d**).