



Supporting Information

for

A new method for the synthesis of diamantane by hydroisomerization of binor-S on treatment with sulfuric acid

Rishat I. Aminov and Ravil I. Khusnudinov

Beilstein J. Org. Chem. **2020**, *16*, 2534–2539. doi:10.3762/bjoc.16.205

Experimental procedures, NMR, and mass spectral data

The graphical spectra of diamantane are identical to the literature data [Aminov, R. I., Akshieva, A. N., Khusnudinov, R. I. *Catal. Commun.* **2019**, 130, 105756].

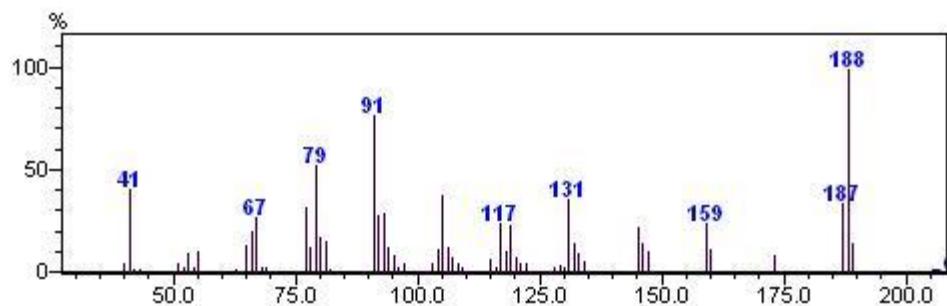


Figure S1: Mass spectrum of tetrahydrobinor-S (**3c**).

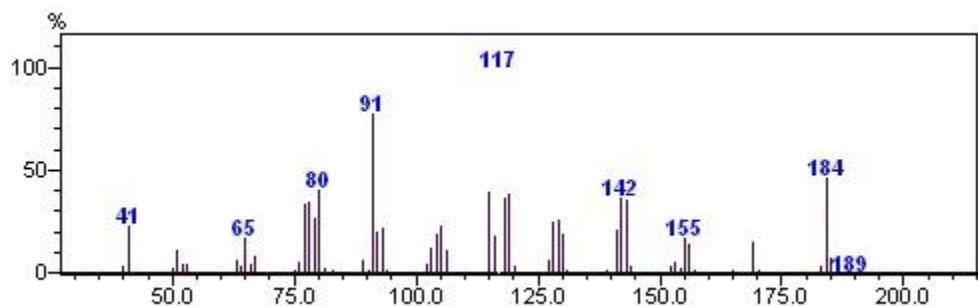


Figure S2: Mass spectrum of hexacyclo[8.4.0.0^{2,7}.0^{3,14}.0^{4,8}.0^{9,13}]tetradec-5-ene (**4a**).

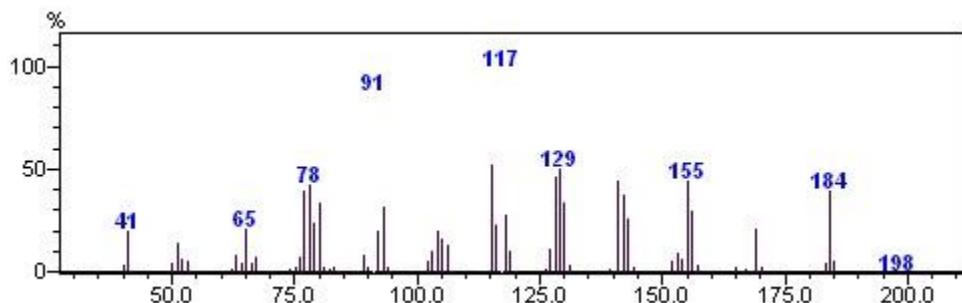


Figure S3: Mass spectrum of hexacyclo[6.6.0.0.0^{2,6}.0^{5,14}.0^{7,12}.0^{9,13}]tetradec-3-ene (**4b**)

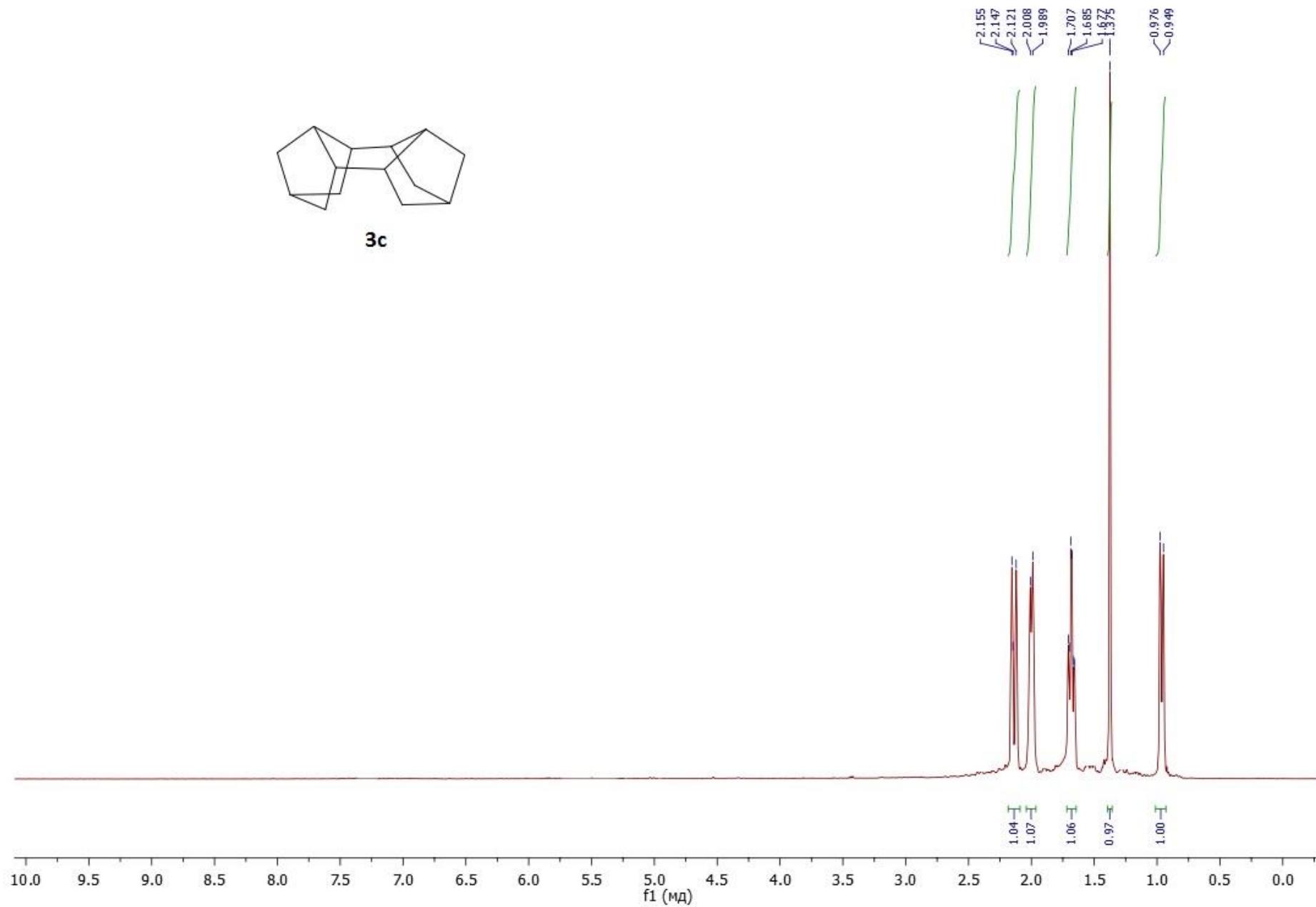


Figure S4: ^1H NMR spectrum of tetrahydrobinor-S (**3c**) in CDCl_3 .

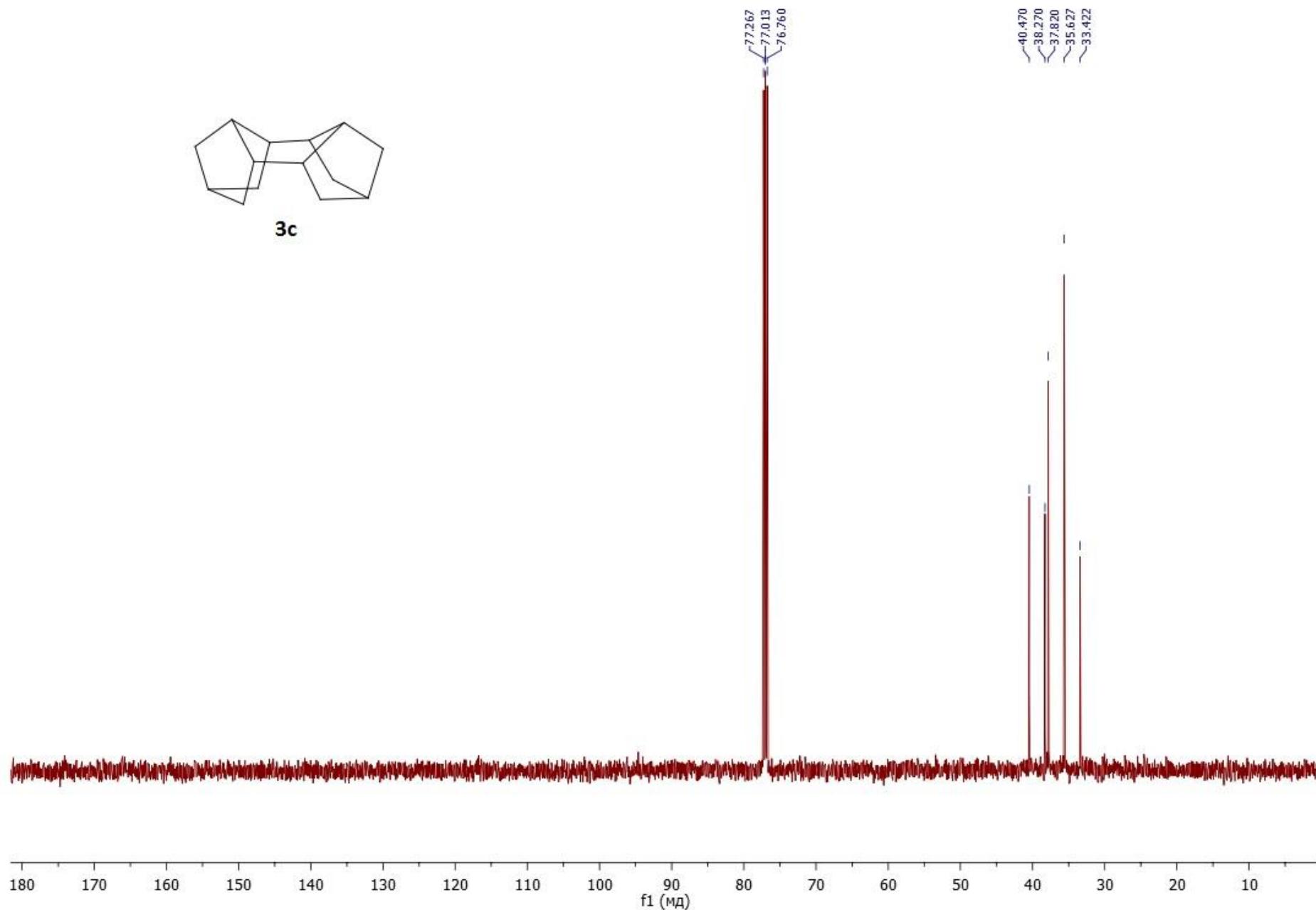


Figure S5: ^{13}C NMR spectrum of tetrahydrobinor-S (**3c**) in CDCl_3 .

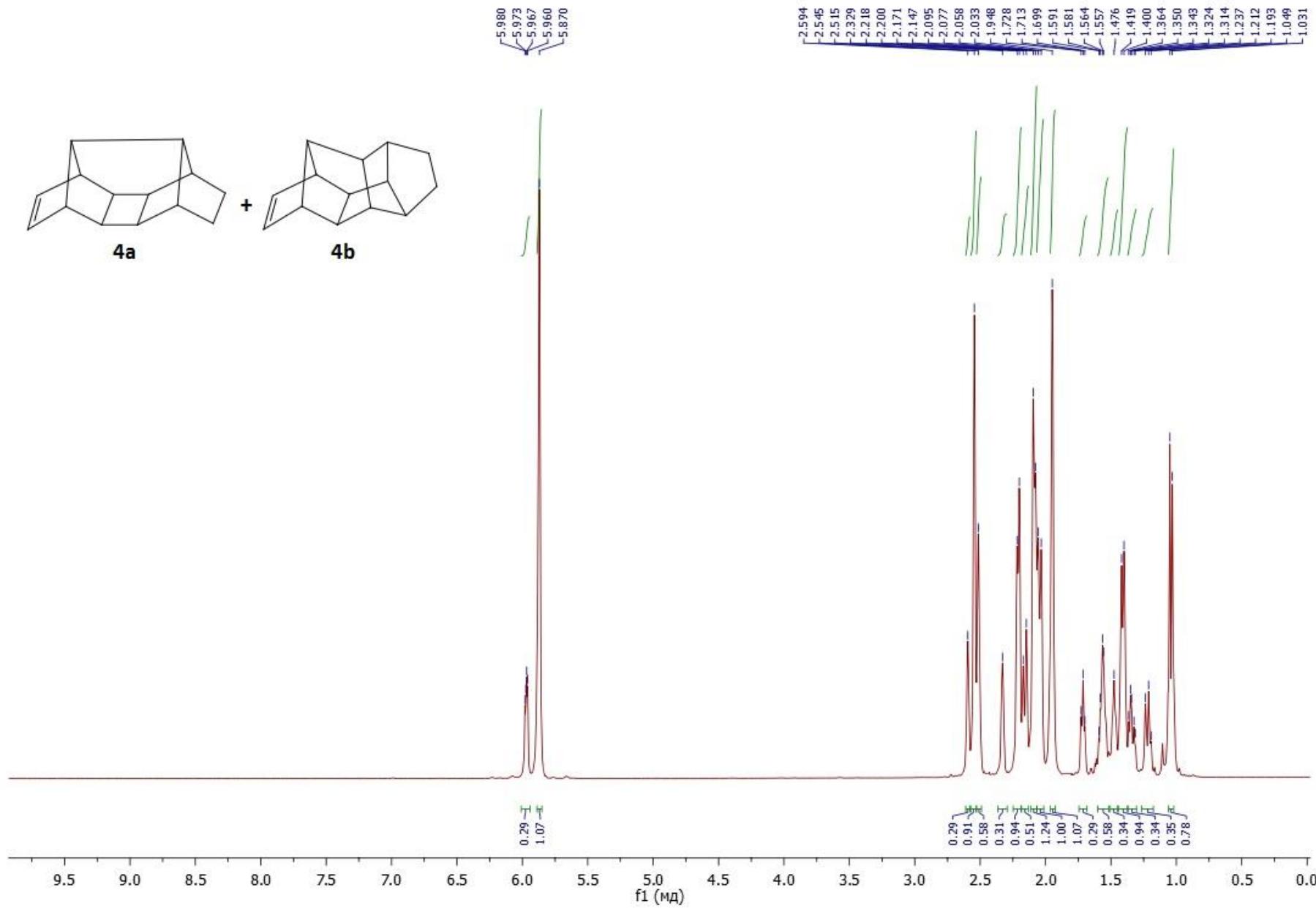


Figure S6: ¹H NMR spectrum of mixture hexacyclo[8.4.0.0^{2,7}.0^{3,14}.0^{4,8}.0^{9,13}]tetradec-5-ene (**4a**) and hexacyclo[6.6.0.0^{2,6}.0^{5,14}.0^{7,12}.0^{9,13}]tetradec-3-ene (**4b**) in CDCl₃.

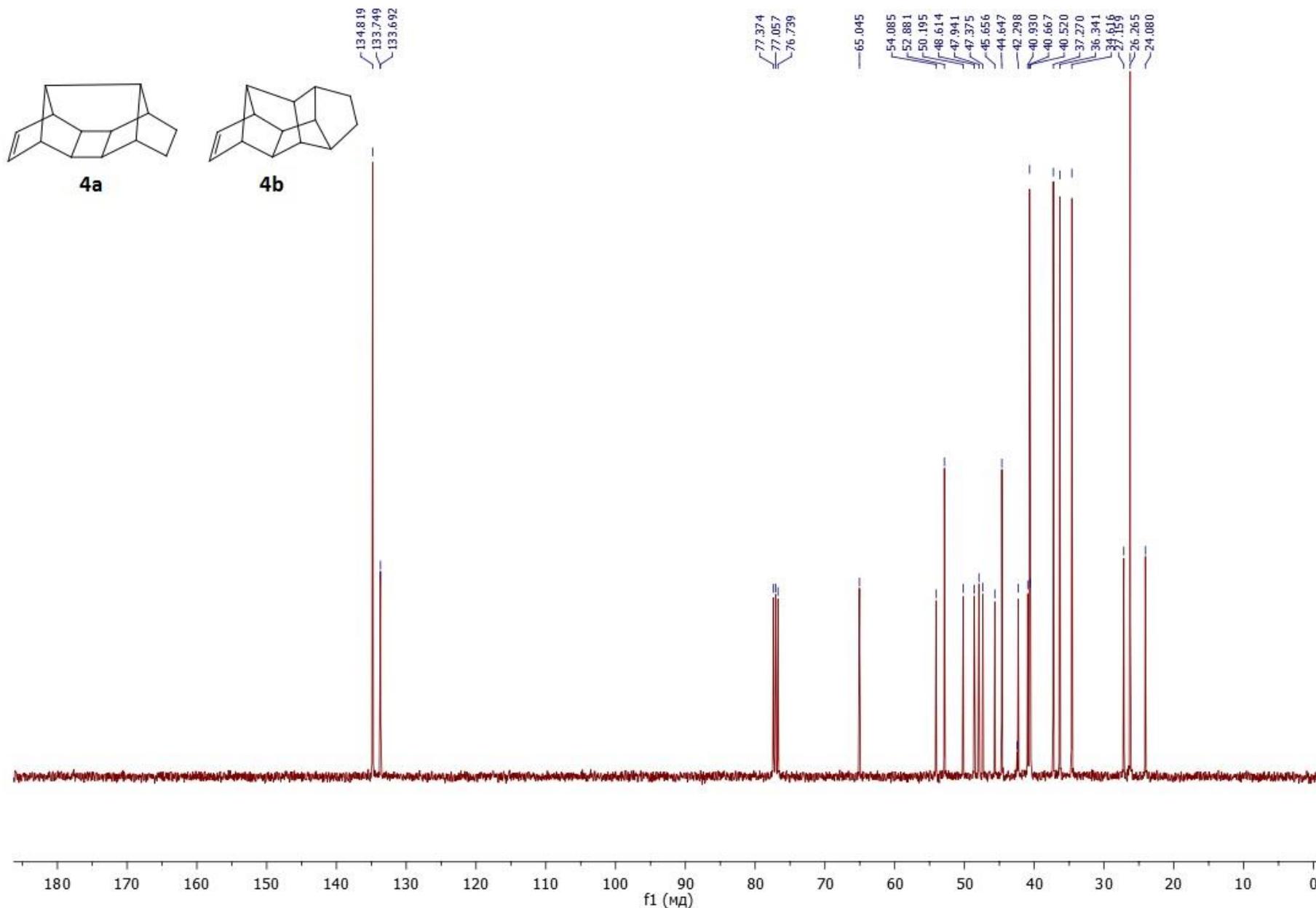


Figure S7: ¹³C NMR spectrum of mixture hexacyclo[8.4.0.0^{2,7}.0^{3,14}.0^{4,8}.0^{9,13}]tetradec-5-ene (**4a**) and hexacyclo[6.6.0.0^{2,6}.0^{5,14}.0^{7,12}.0^{9,13}]tetradec-3-ene (**4b**) in CDCl₃.