

SUPPLEMENTARY MATERIAL

New Elements On the Behavior of a Bissulfinyl Radical

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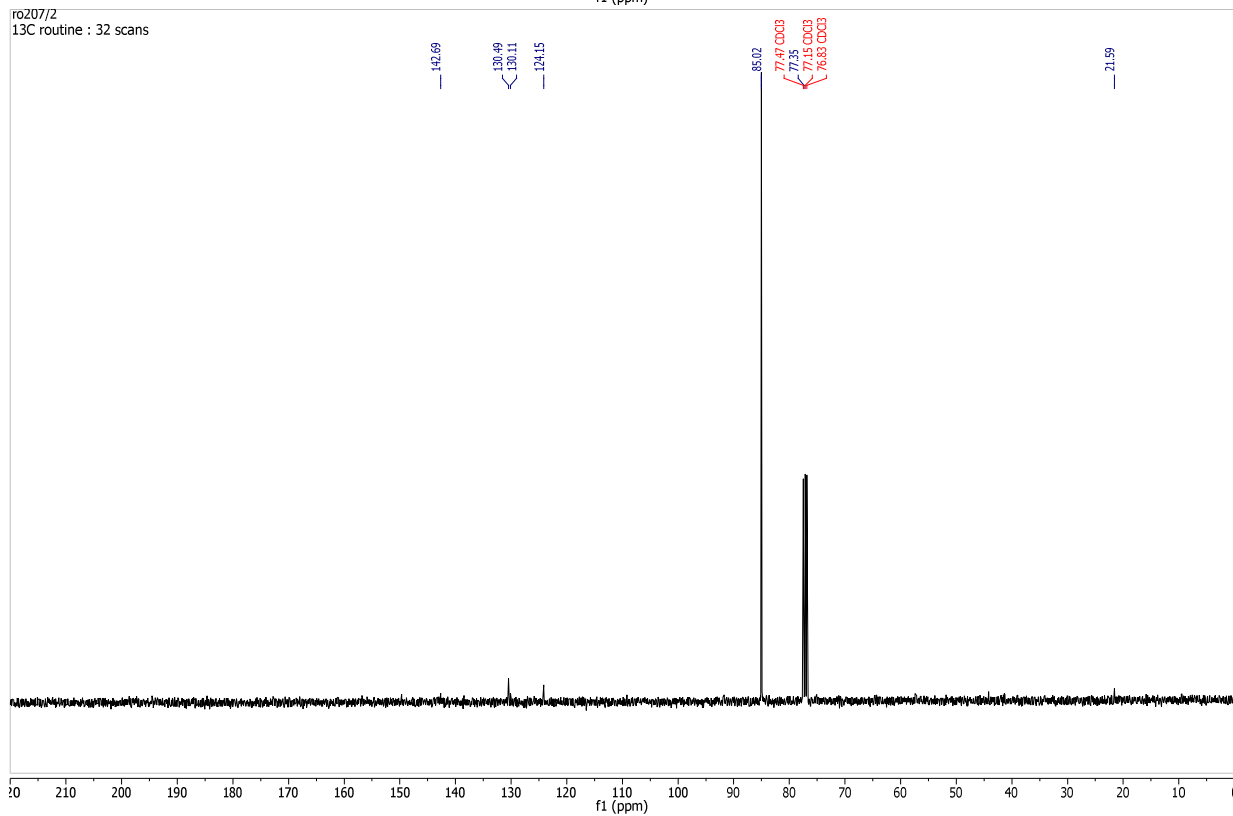
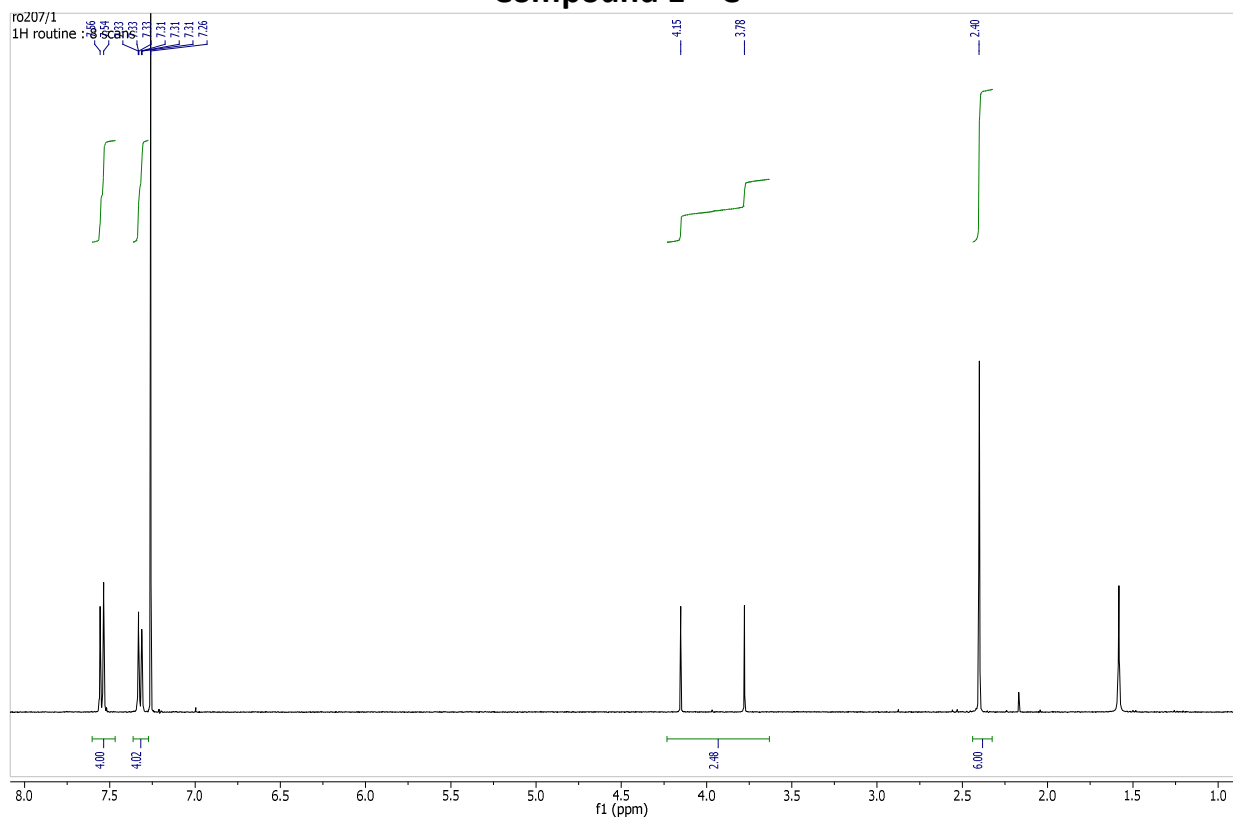
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Dedicated to the memory of Athelstan Beckwith, one of the pioneers who brought radical chemistry to organic synthesis

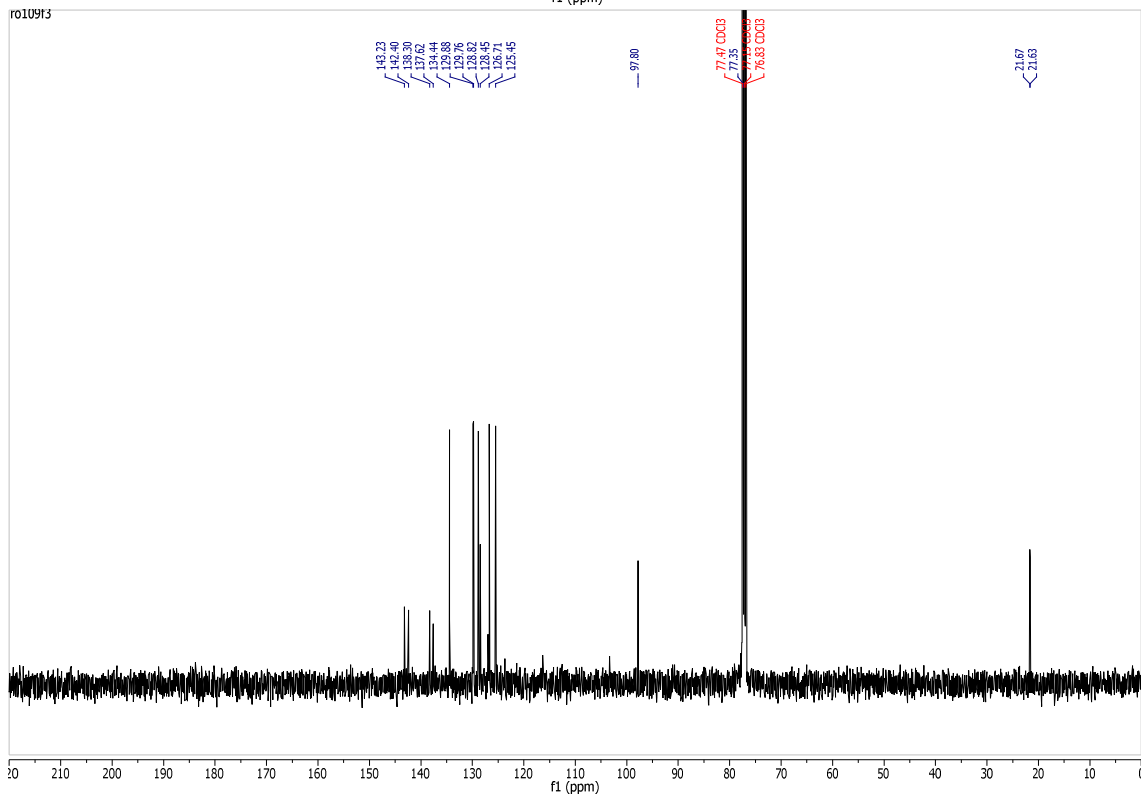
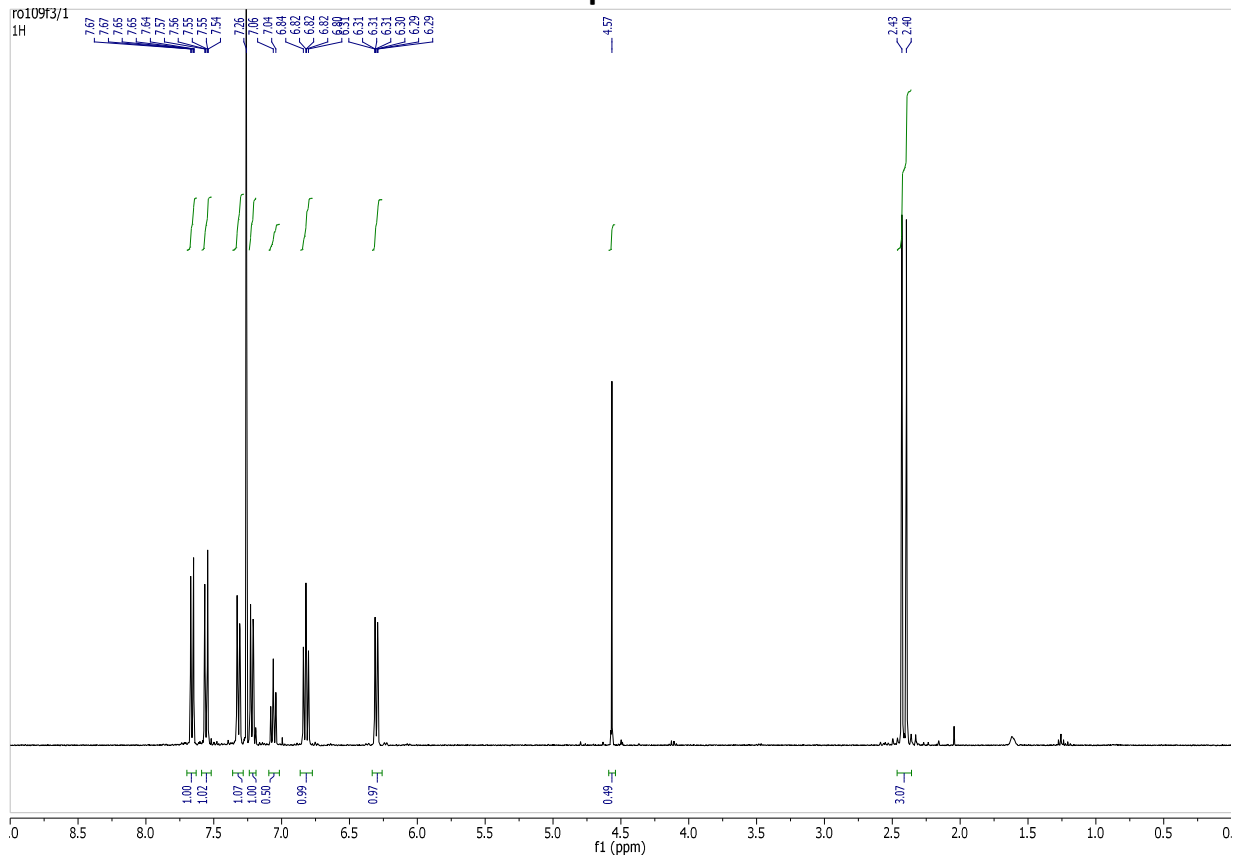
General informations :

Reactions were carried out under argon in oven-dried glassware. THF was distilled over sodium/benzophenone. Toluene, CH₂Cl₂ and DCE were distilled from CaH₂. Thin-layer chromatography (TLC) was performed on Merck 60 F254 silica gel. Merck Gerudan SI 60 P silica gel (35–70 mm) was used for column chromatography. The melting point reported was measured with a Reichert hot stage apparatus and is uncorrected. IR spectra were recorded with a Bruker Tensor 27 ATR diamant PIKE spectrometer. NMR spectra (¹H, ¹³C, DEPT, [¹H,¹H] and [¹H,¹³C] correlations) were recorded at room temperature on Bruker AV 300 and 400 AVANCE spectrometers. Chemical shifts are given in parts per million, referenced to the residual proton resonance of the solvents ($\delta = 7.26$ ppm for CDCl₃) or to the residual carbon resonance of the solvent ($\delta = 77.16$ ppm for CDCl₃) When possible, ¹H and ¹³C signals were assigned mostly on the basis of DEPT and 2D NMR (COSY, HMBC) experiments. Stereochemistry of products was deduced from NOE measurements. The terms m, s, d, t, q represent multiplet, singlet, doublet, triplet, quadruplet, respectively and the term br means a broad signal. High resolution mass spectroscopy (ESI-HRMS) were performed by the Plate-forme technique d'analyse et de spectroscopie (UMR 7201), Université Pierre et Marie Curie, Paris 6.

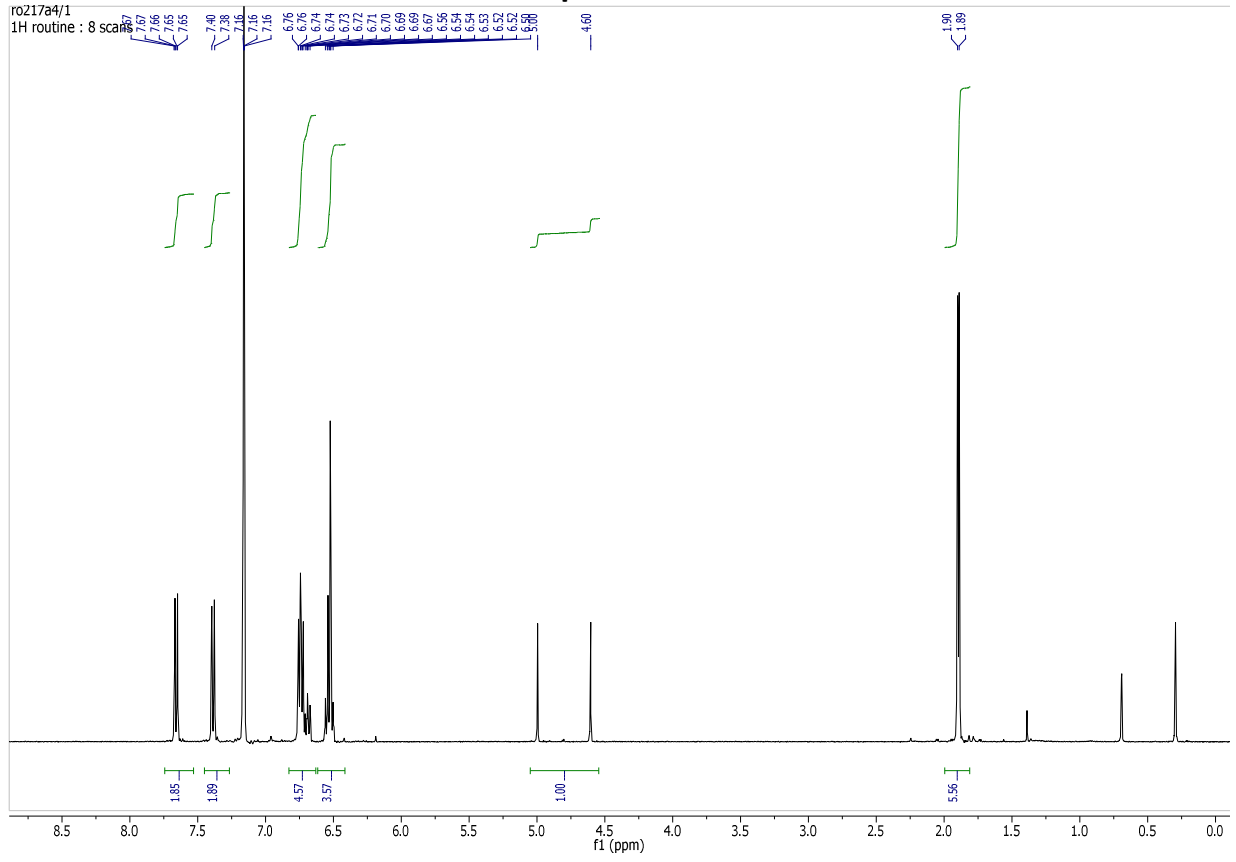
Compound 1-¹³C



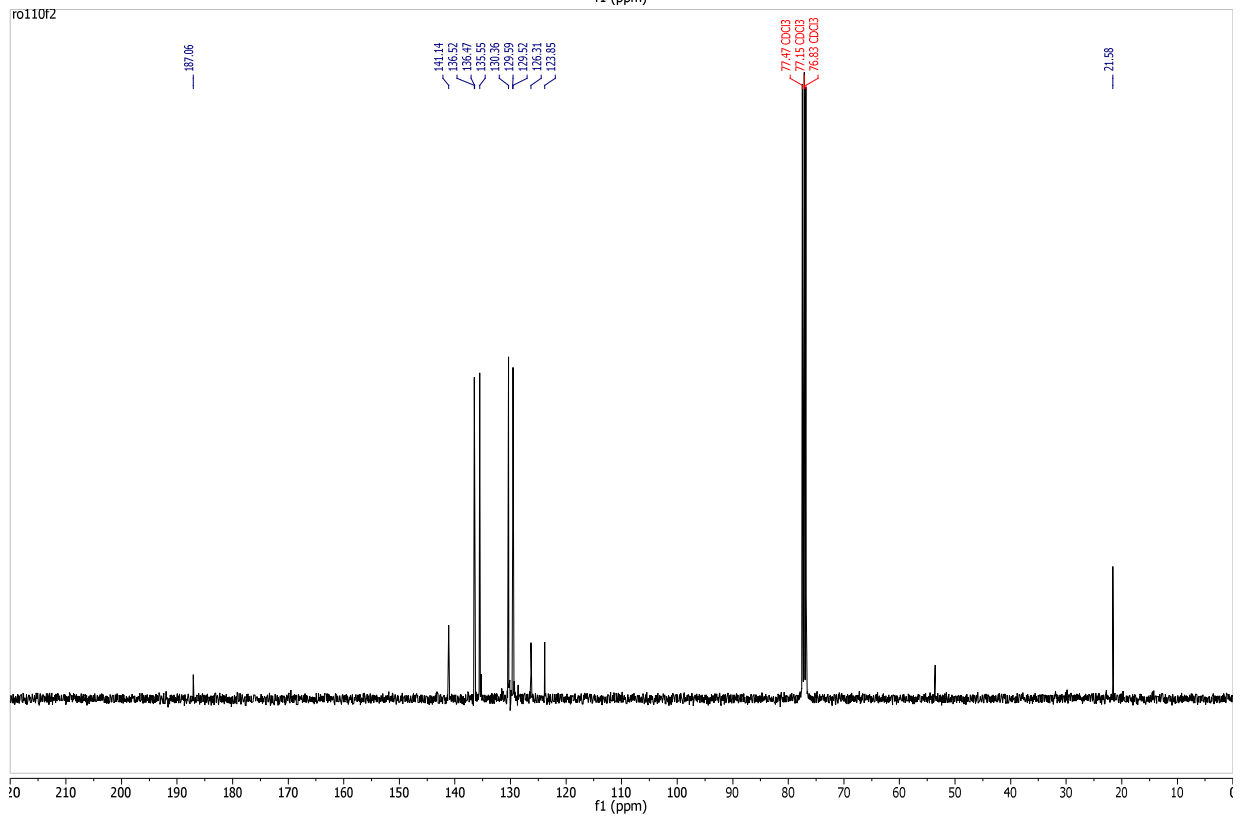
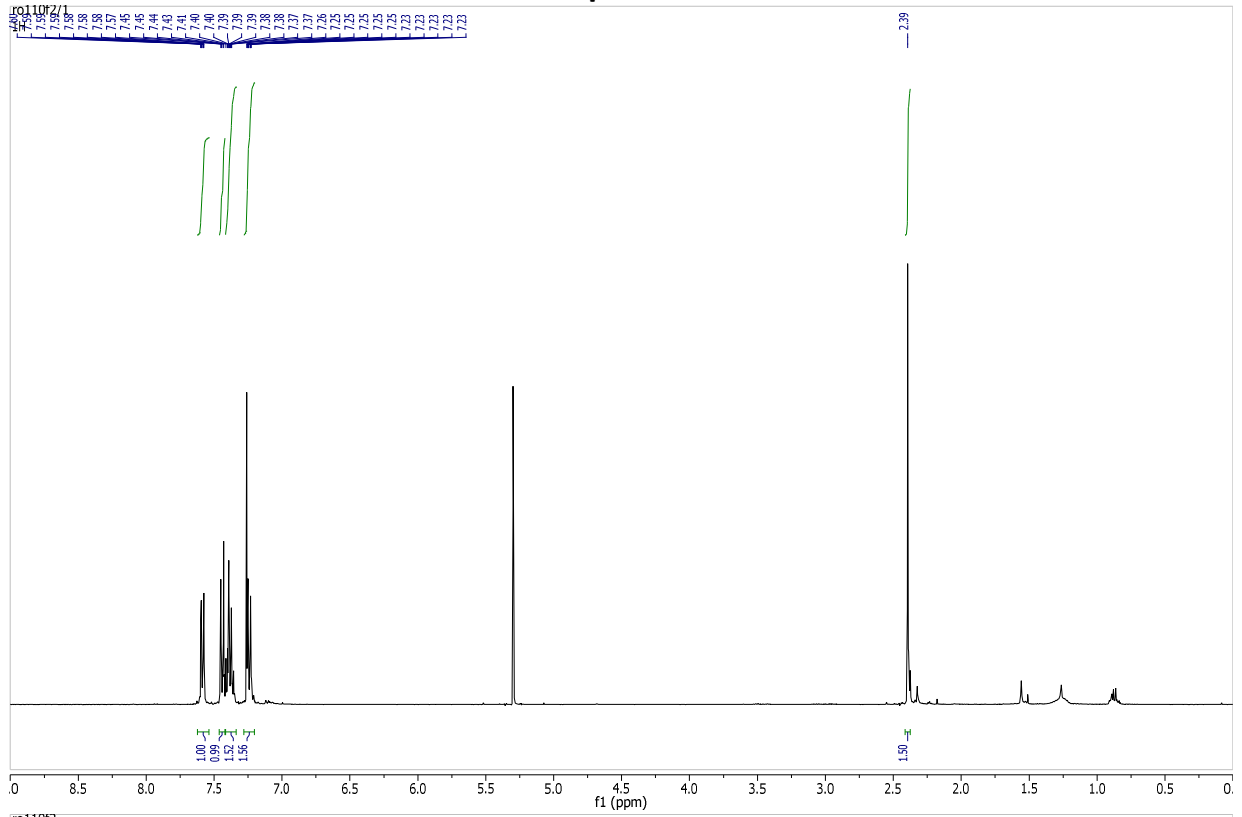
Compound 6



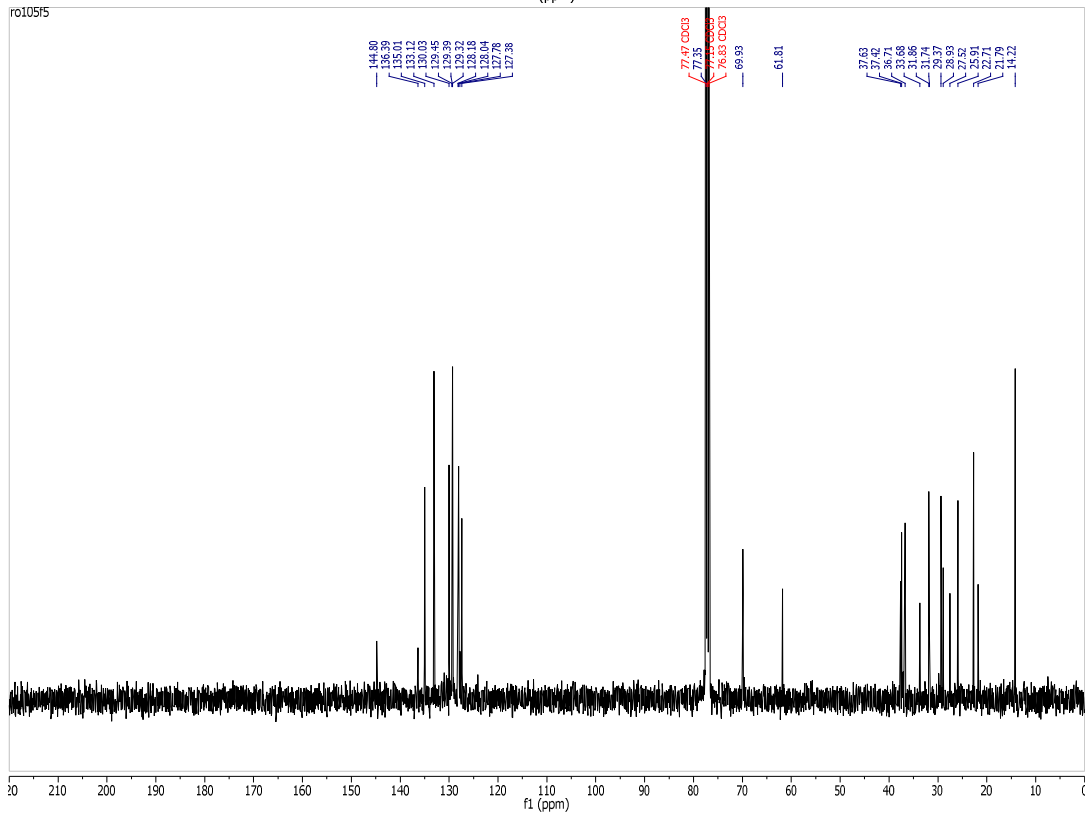
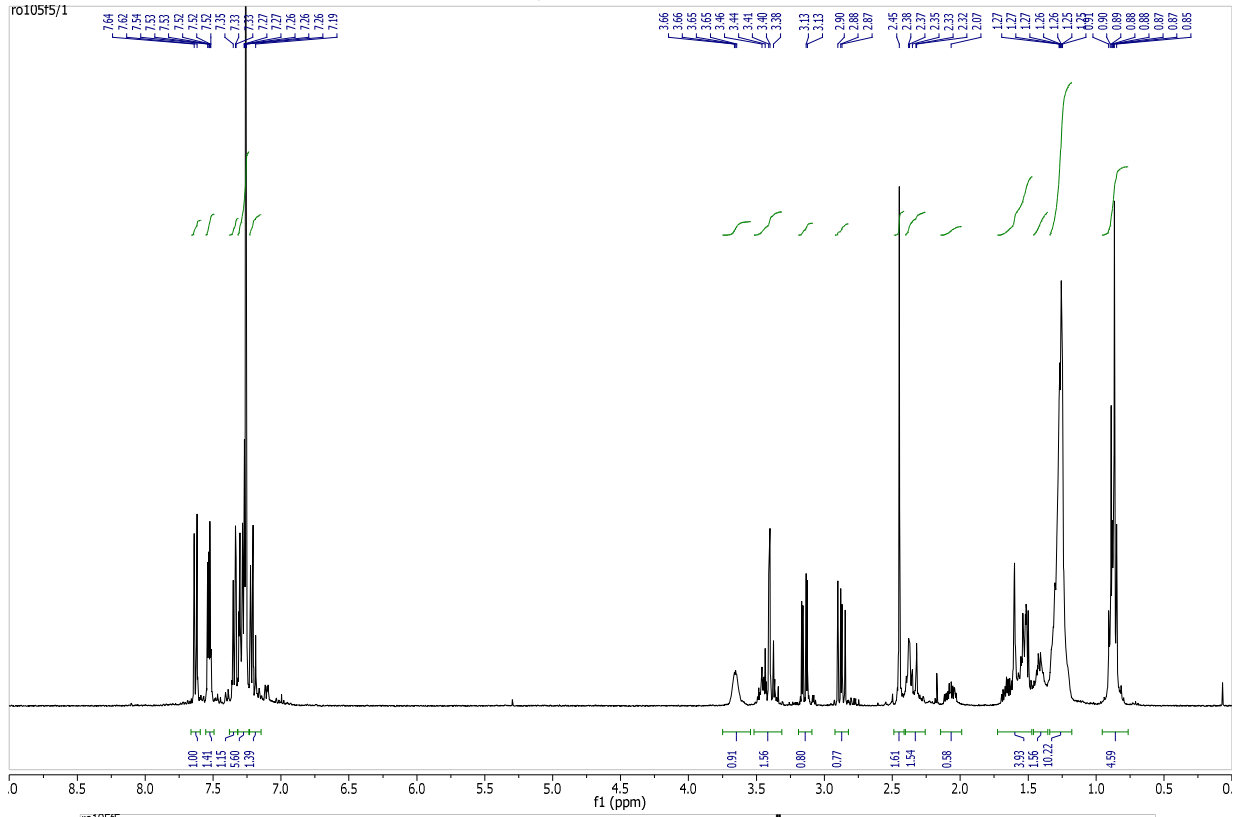
Compound 6-¹³C



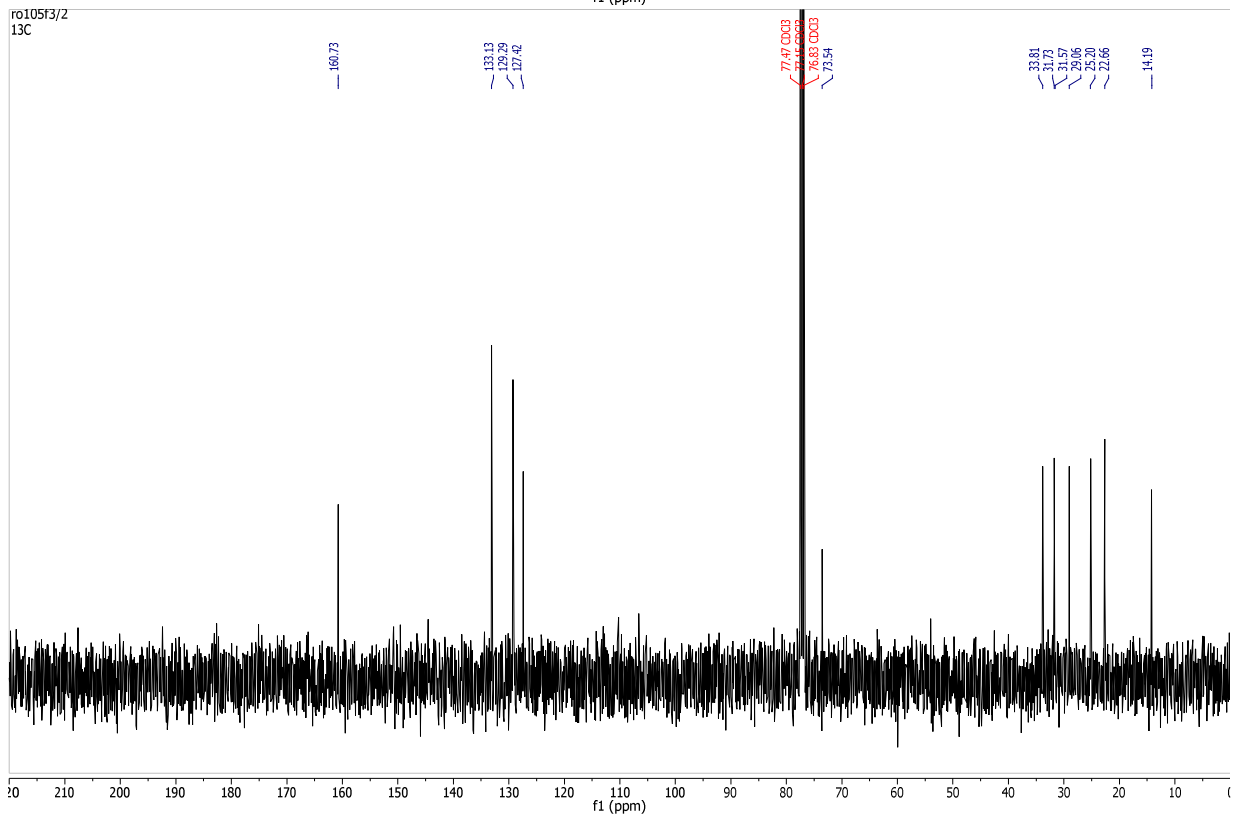
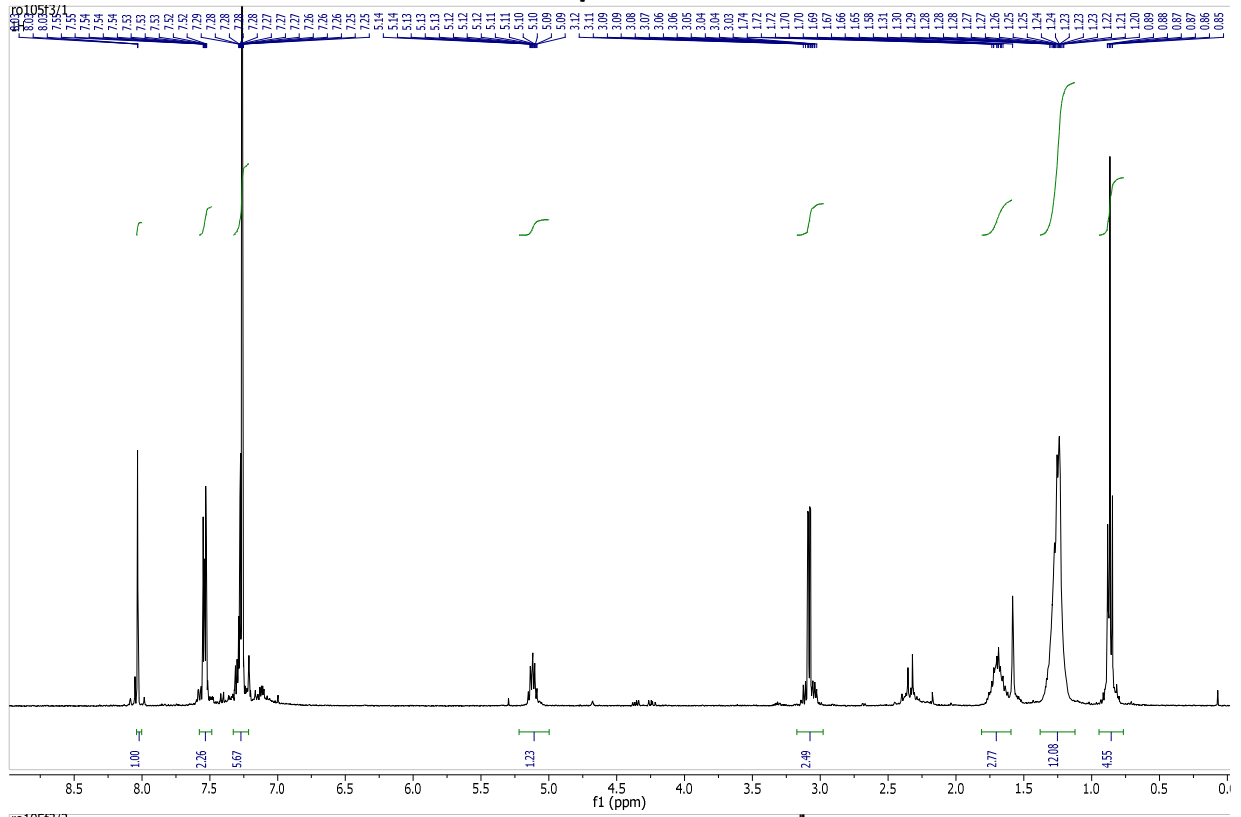
Compound 7



9/10 mixture



Compound 11



Compound 14-¹³C

