Remote functionalization of C_{60} with enantiomerically pure *cyclo*-[2]-malonate tethers bearing C12 and C14 spacers. Synthetic access to bisadducts of C_{60} with the inherently chiral *trans*-3 addition pattern

Maria Riala and Nikos Chronakis*

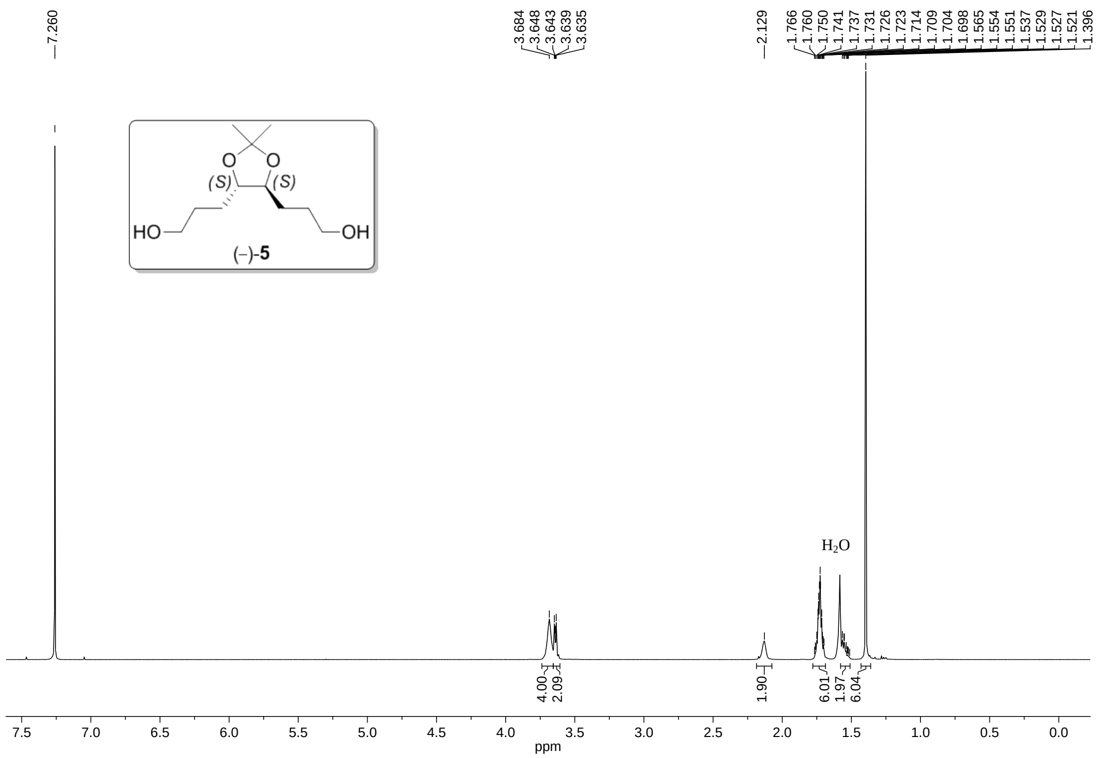
Department of Chemistry, *University of Cyprus*, University str 1, Building No13, Aglantzia, 2109 *Nicosia*, *Cyprus*

nchronak@ucy.ac.cy

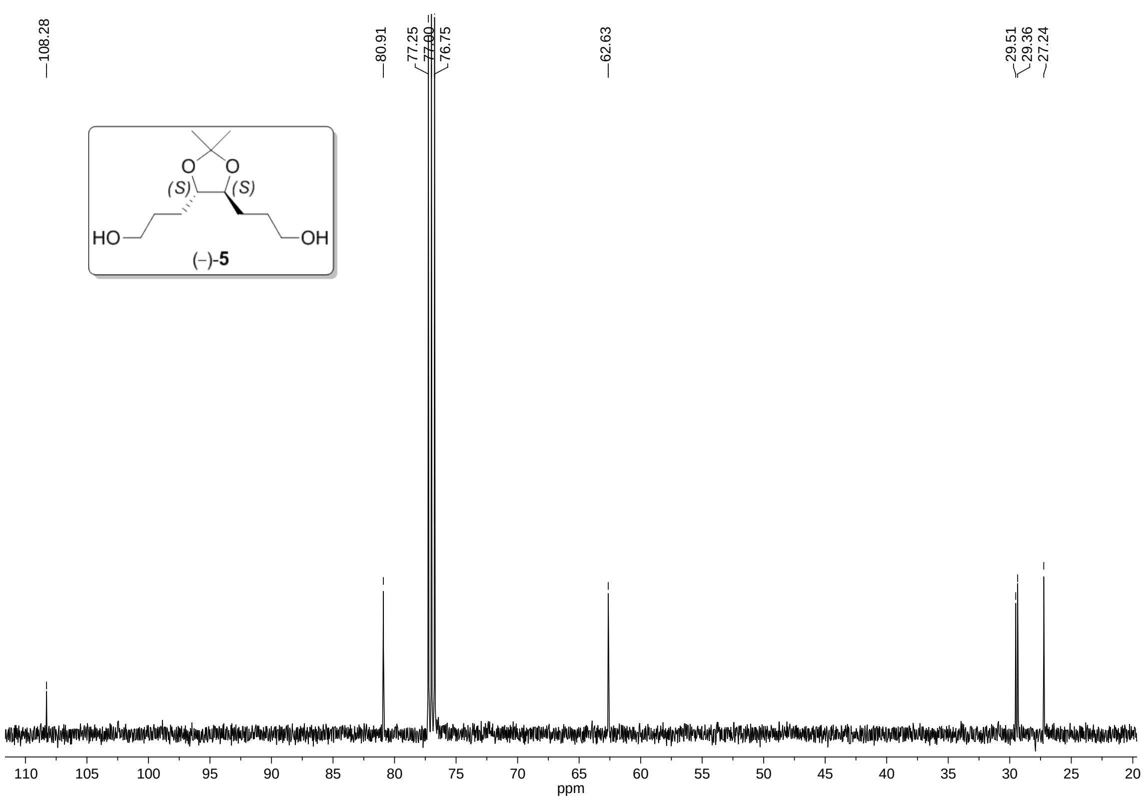
Supporting Information

Table of Contents

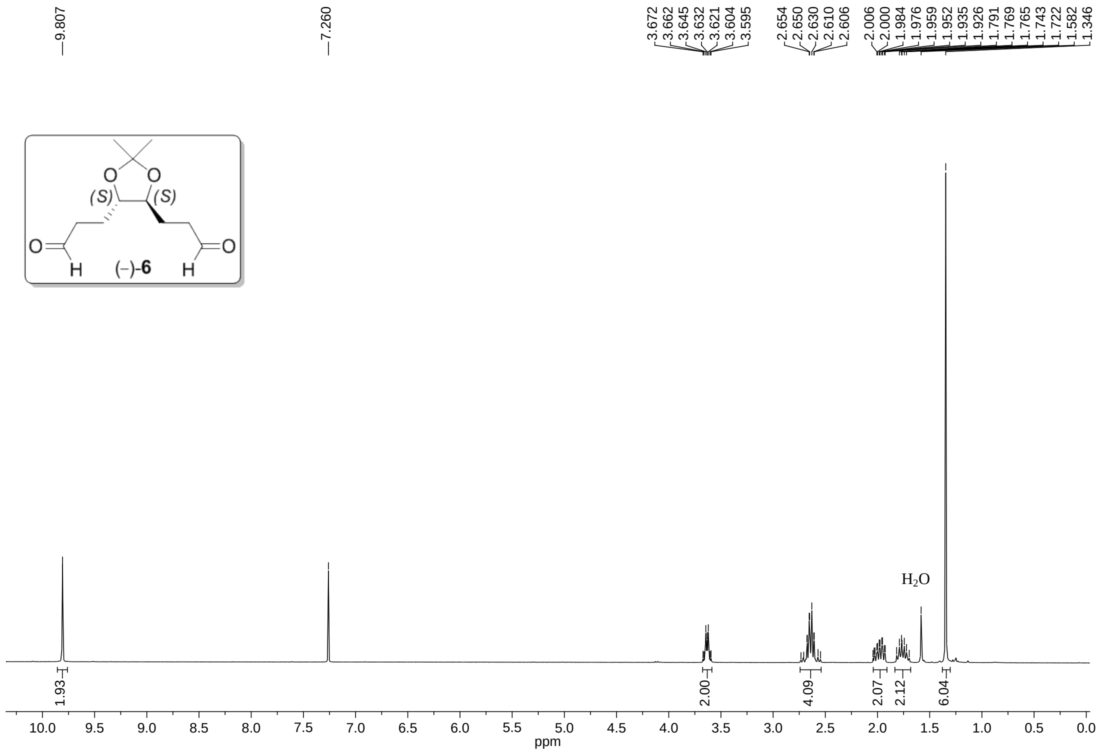
^{1}H NMR spectra (500 MHz, $CDCl_3$, 25°C) of **(–)-5**



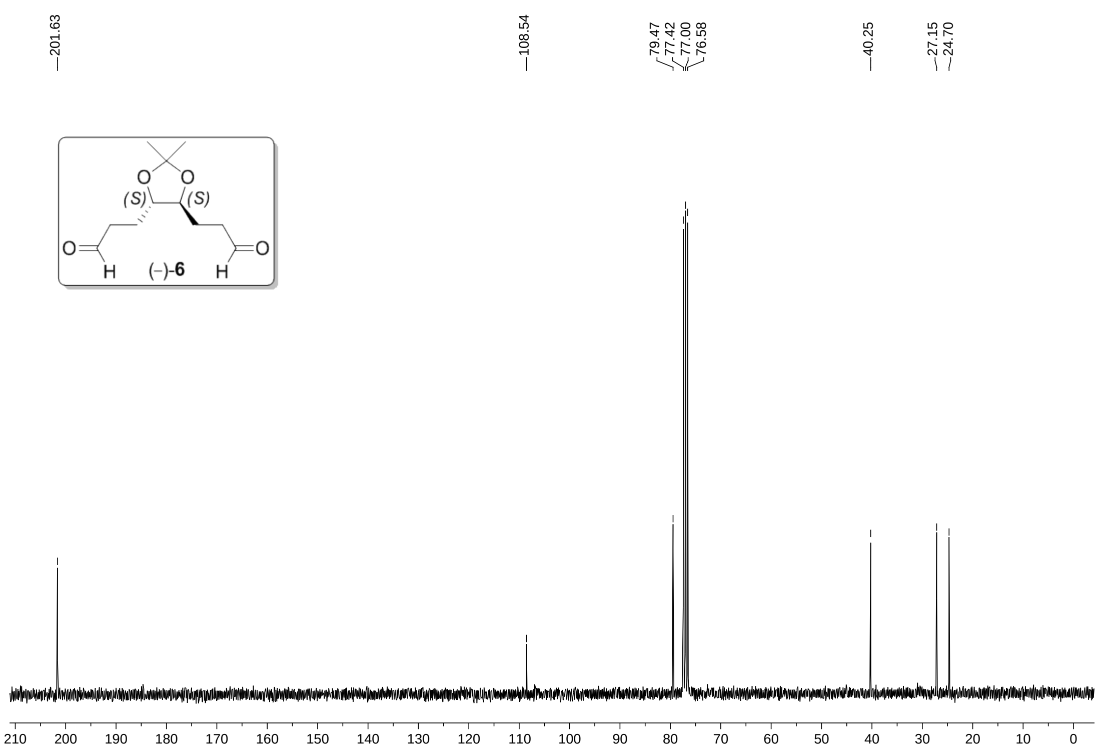
^{13}C NMR spectra (125 MHz, $CDCl_3$, 25°C) of **(–)-5**



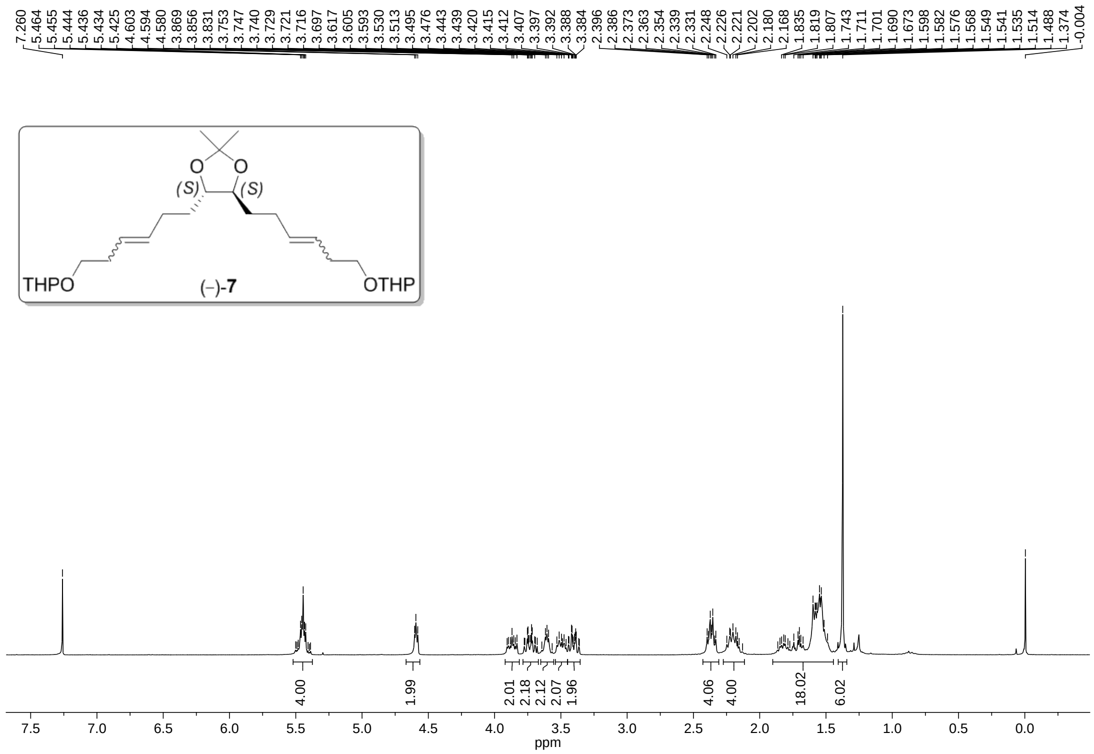
^{1}H NMR spectra (300 MHz, $CDCl_3$, 25°C) of **(–)-6**



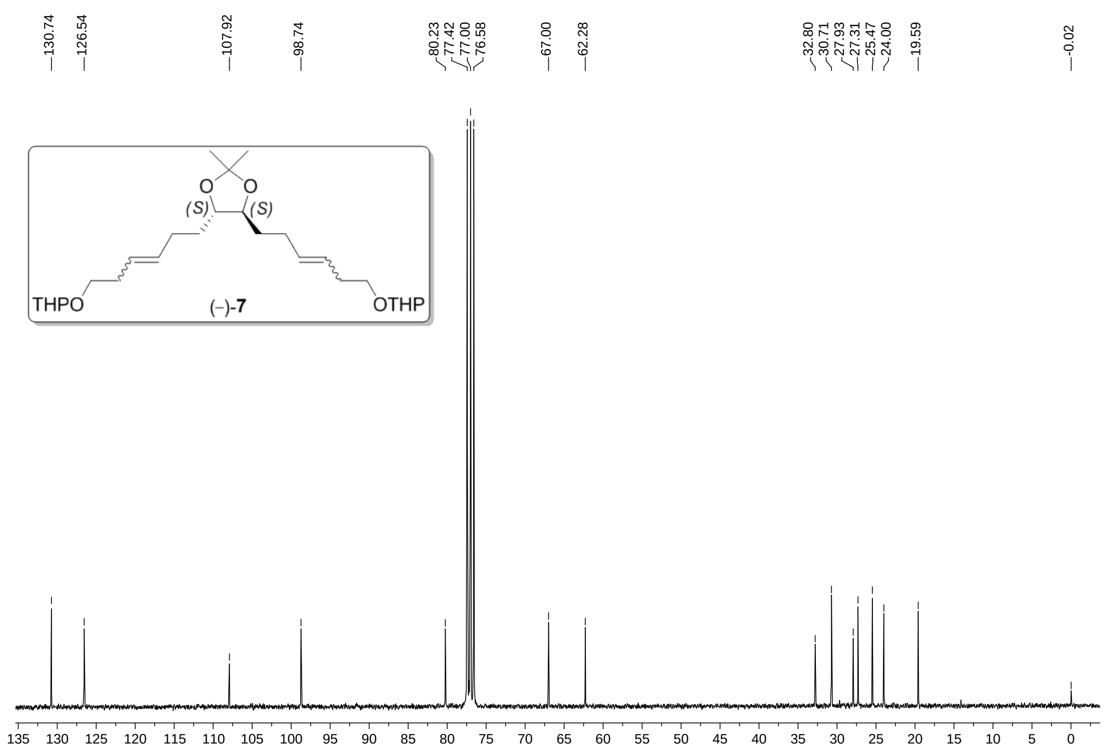
^{13}C NMR spectra (75 MHz, $CDCl_3$, 25°C) of **(–)-6**



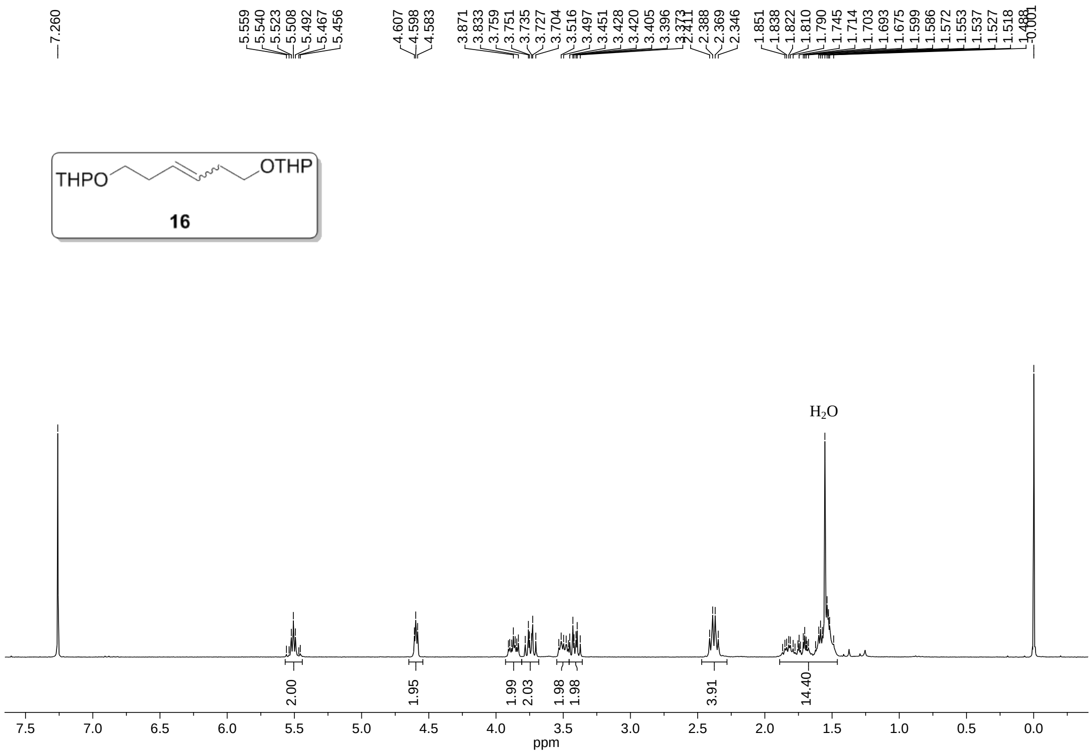
^{1}H NMR spectra (300 MHz, $CDCl_3$, 25°C) of **(–)-7**



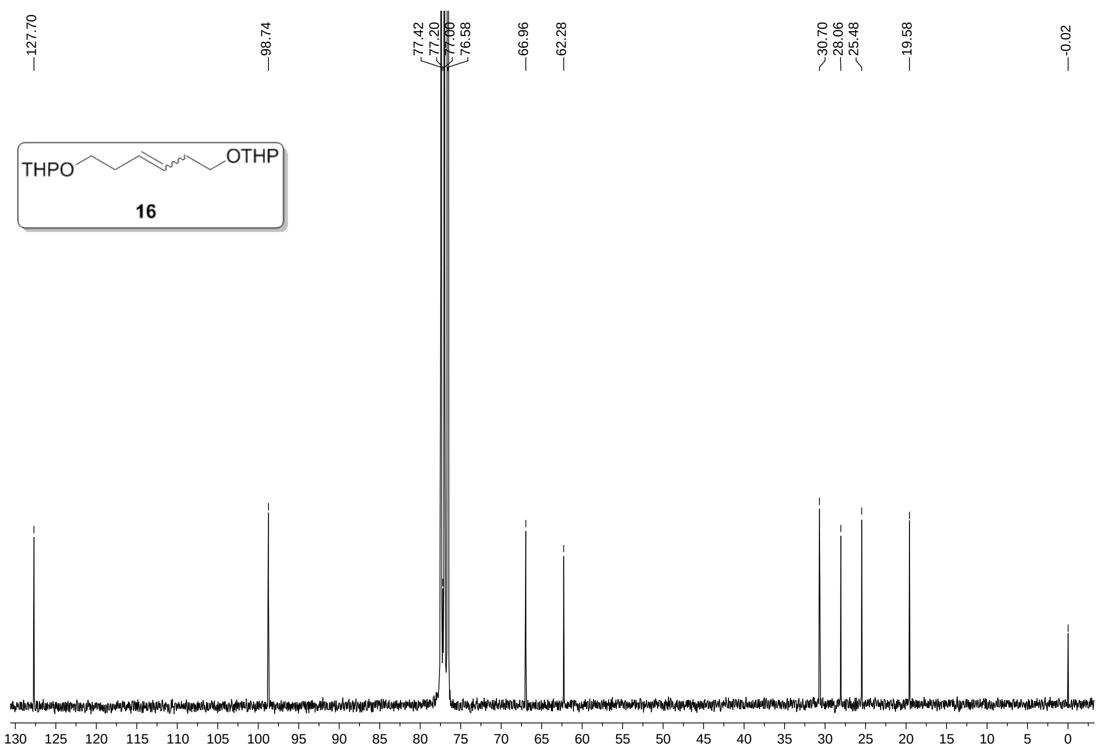
^{13}C NMR spectra (75 MHz, $CDCl_3$, 25°C) of **(–)-7**



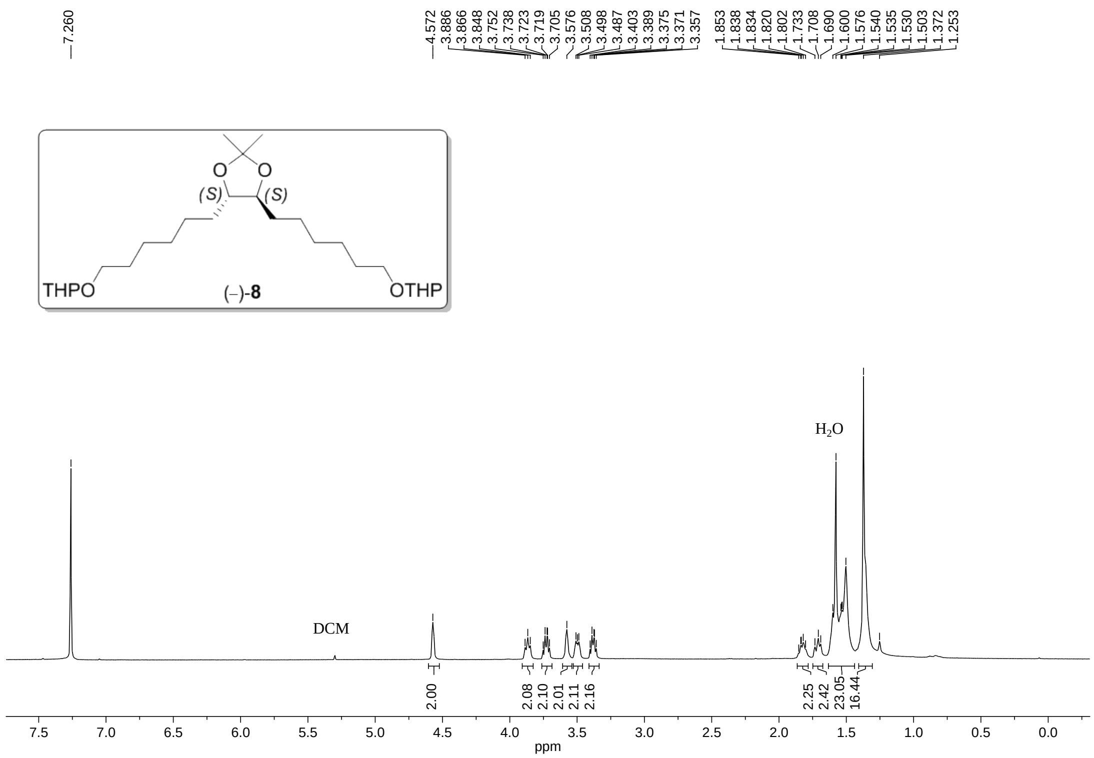
^{1}H NMR spectra (300 MHz, $CDCl_3$, 25°C) of **16**



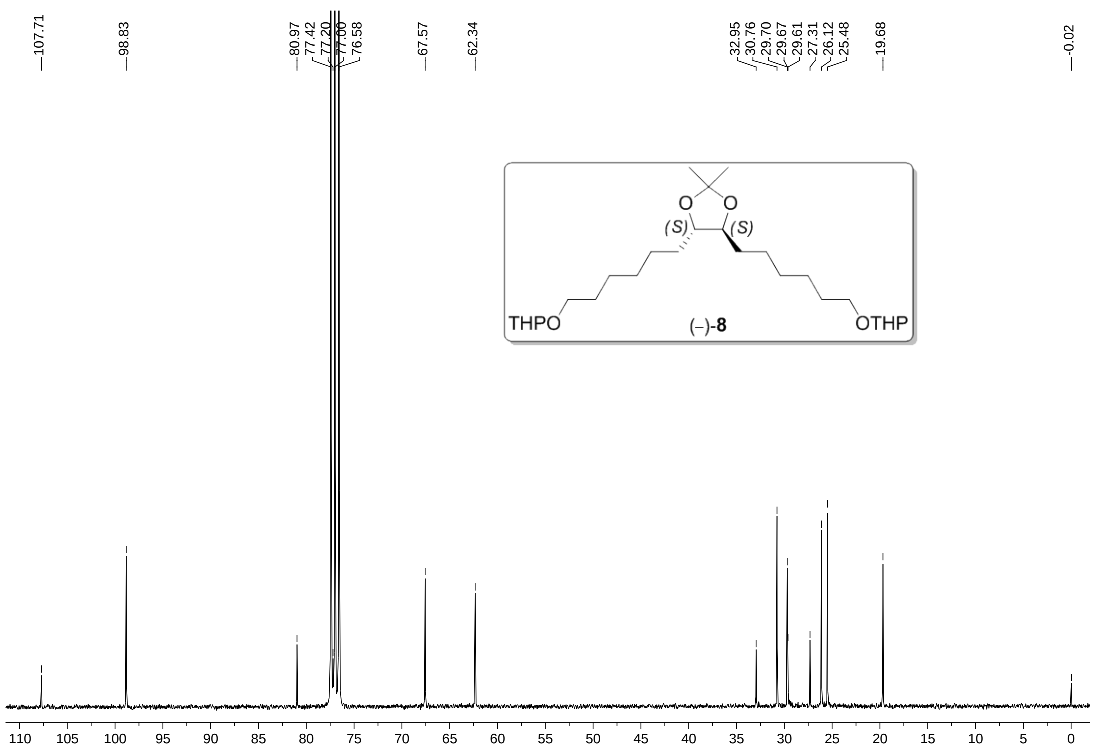
^{13}C NMR spectra (75 MHz, $CDCl_3$, 25°C) of **16**



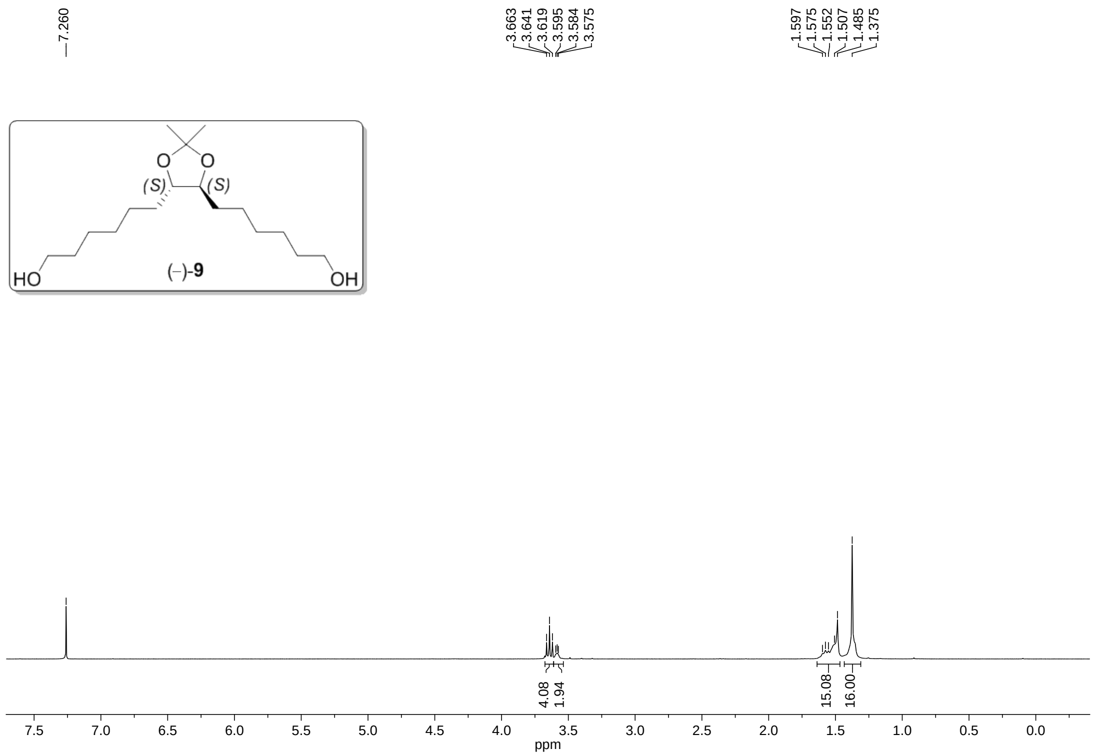
^{1}H NMR spectra (500 MHz, $CDCl_3$, 25°C) of **(–)-8**



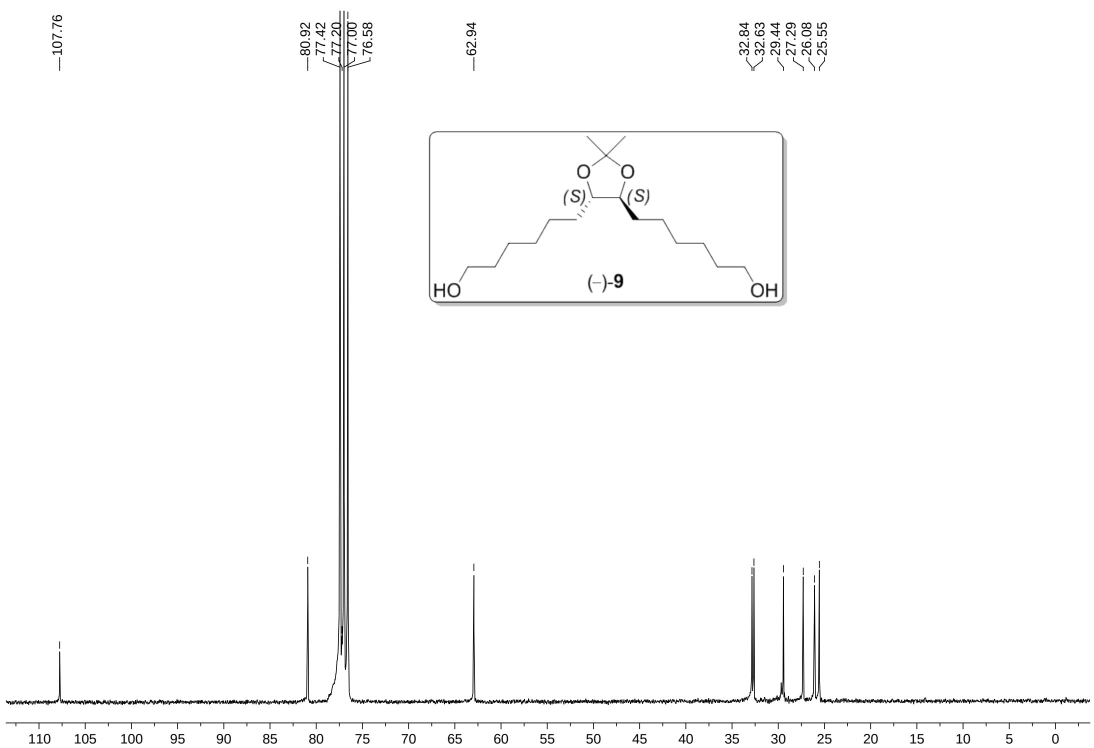
^{13}C NMR spectra (125 MHz, $CDCl_3$, 25°C) of **(–)-8**



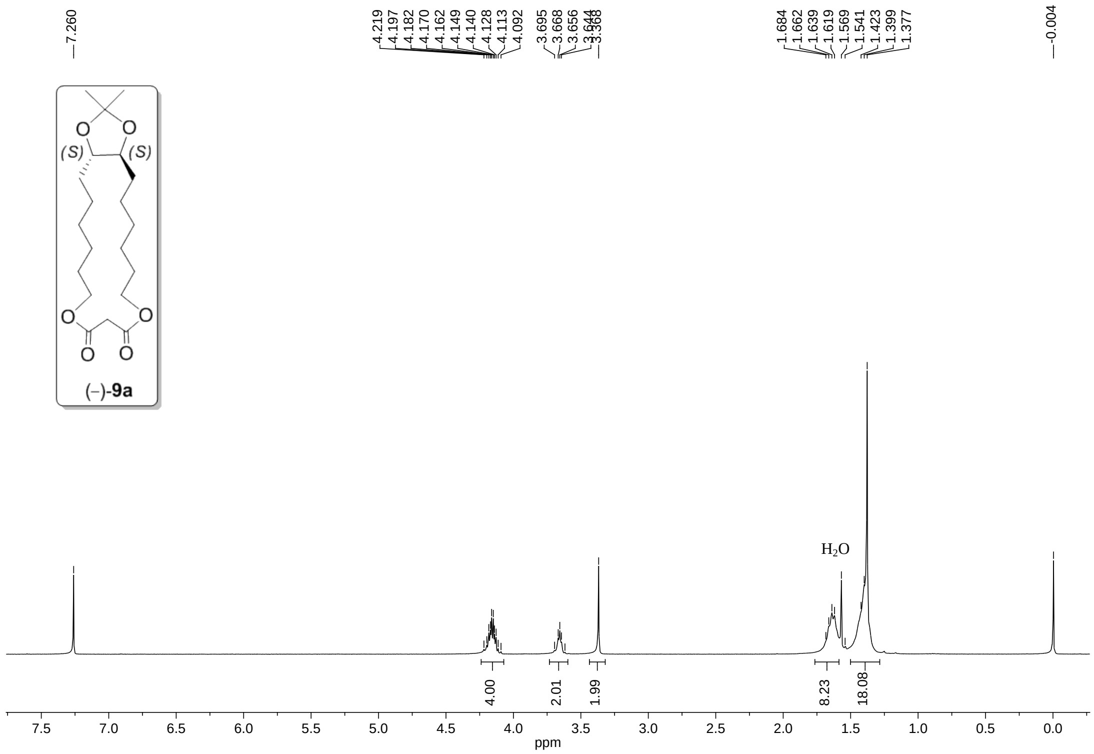
^{1}H NMR spectra (300 MHz, $CDCl_3$, 25°C) of **(–)-9**



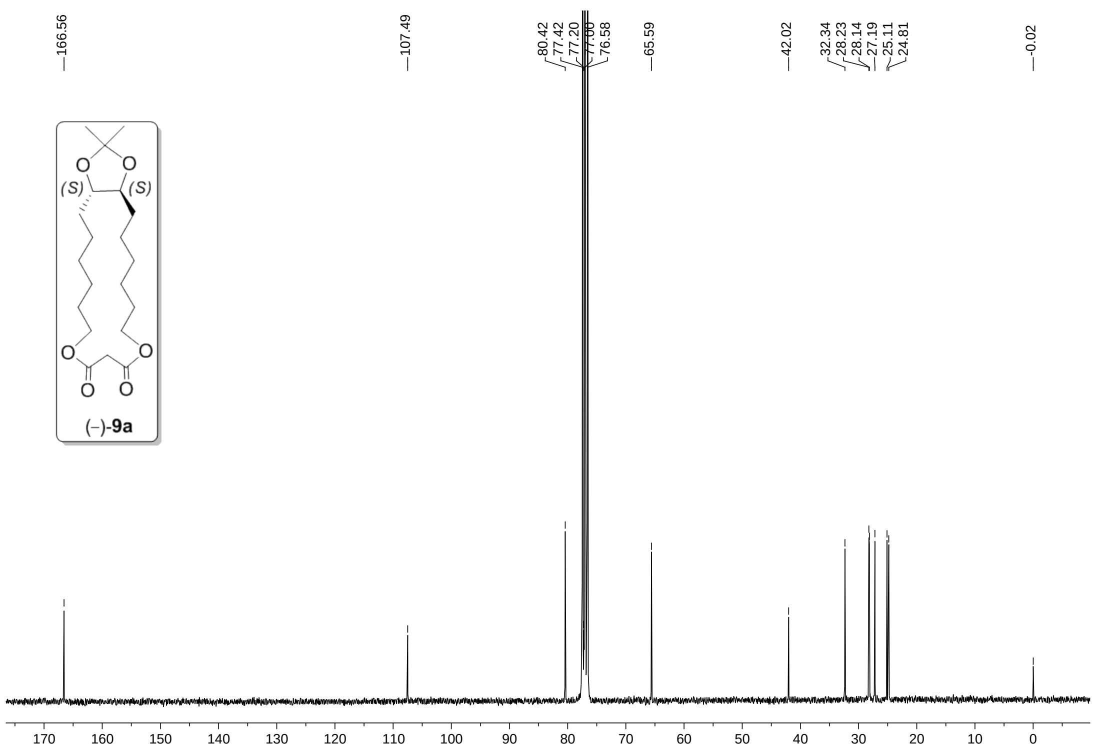
^{13}C NMR spectra (75 MHz, $CDCl_3$, 25°C) of **(–)-9**



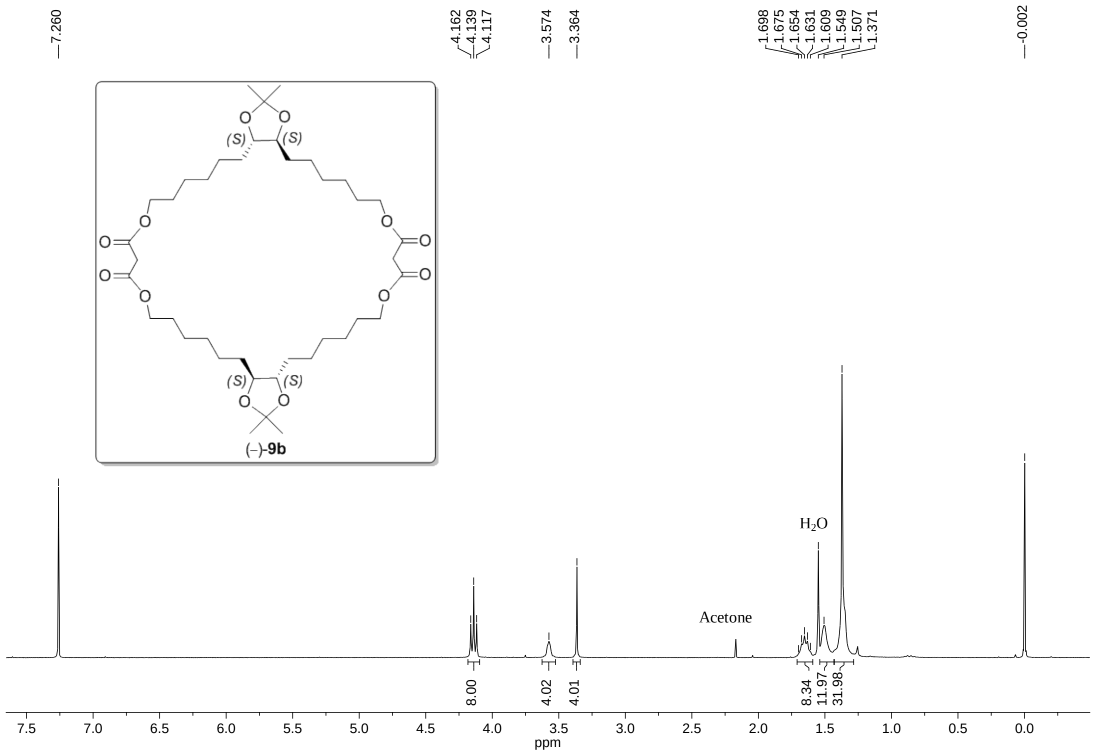
<u>[1]H NMR spectra (300 MHz, $CDCl_3$, 25°C) of **(–)-9a**</u>



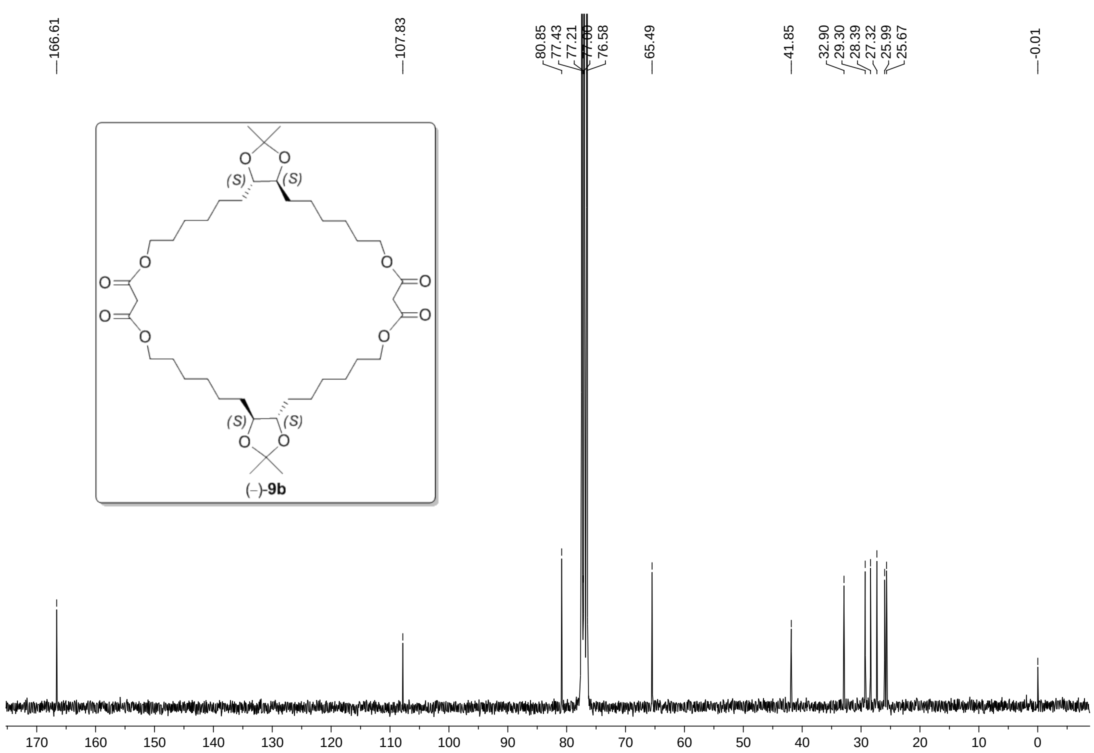
<u>[13]C NMR spectra (75 MHz, $CDCl_3$, 25°C) of **(–)-9a**</u>



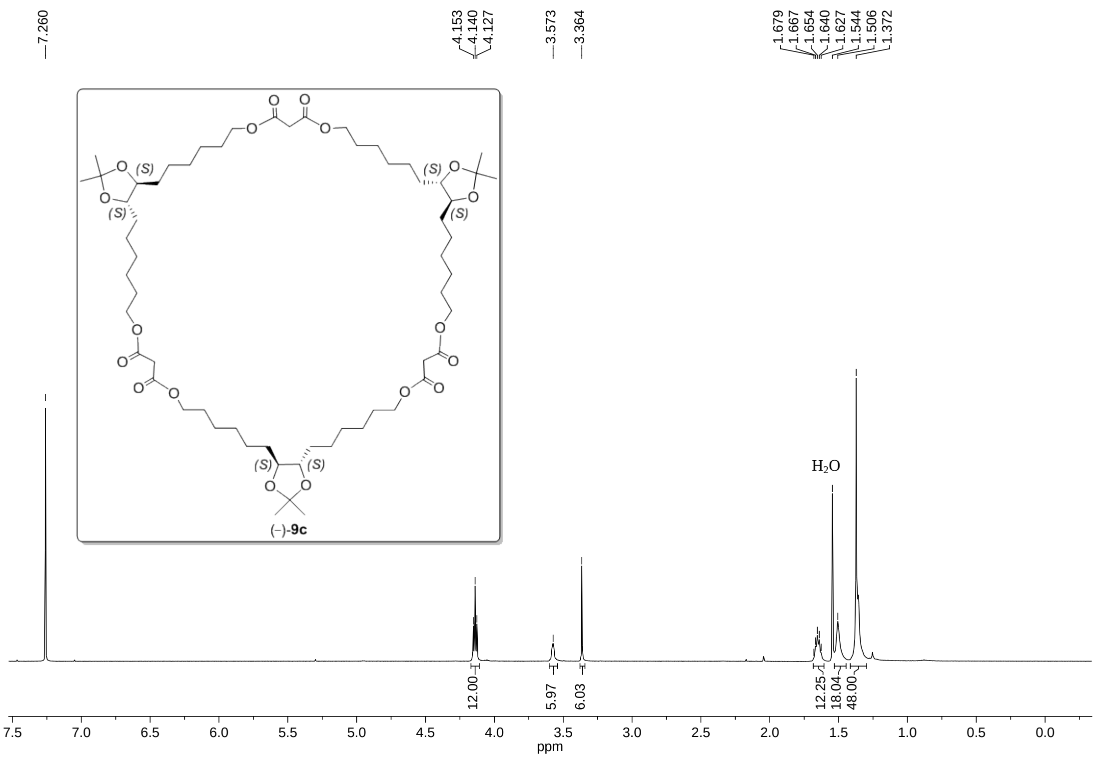
^{1}H NMR spectra (300 MHz, $CDCl_3$, 25°C) of **(–)-9b**



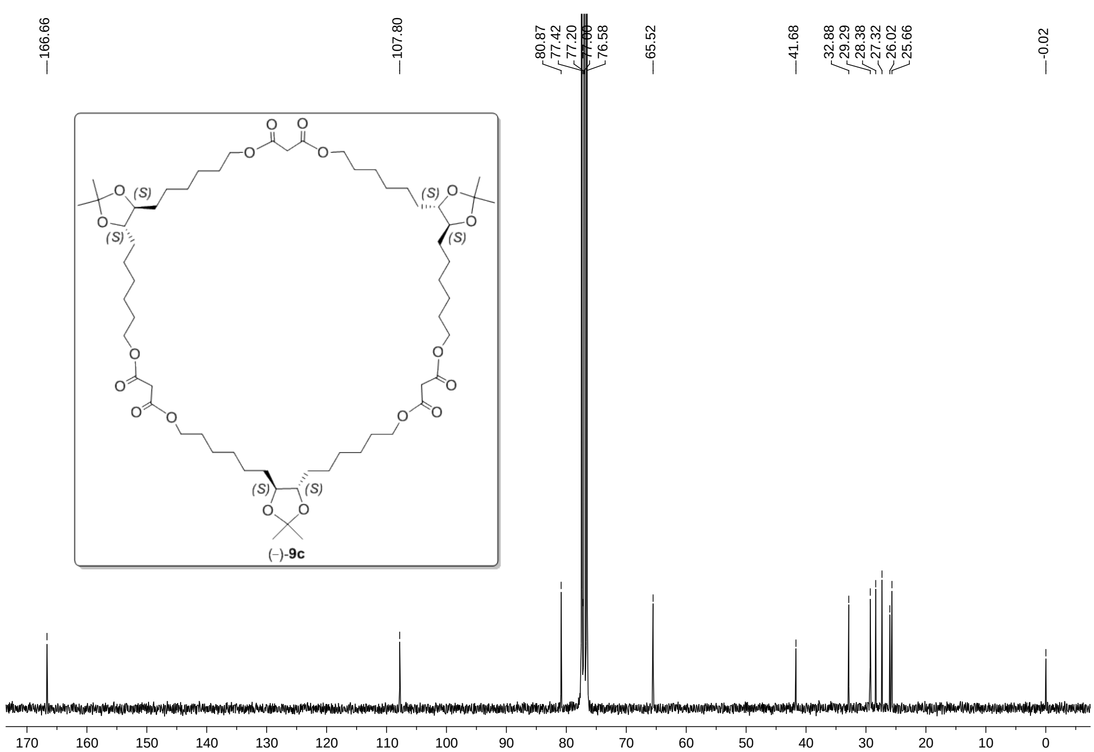
^{13}C NMR spectra (75 MHz, $CDCl_3$, 25°C) of **(–)-9b**



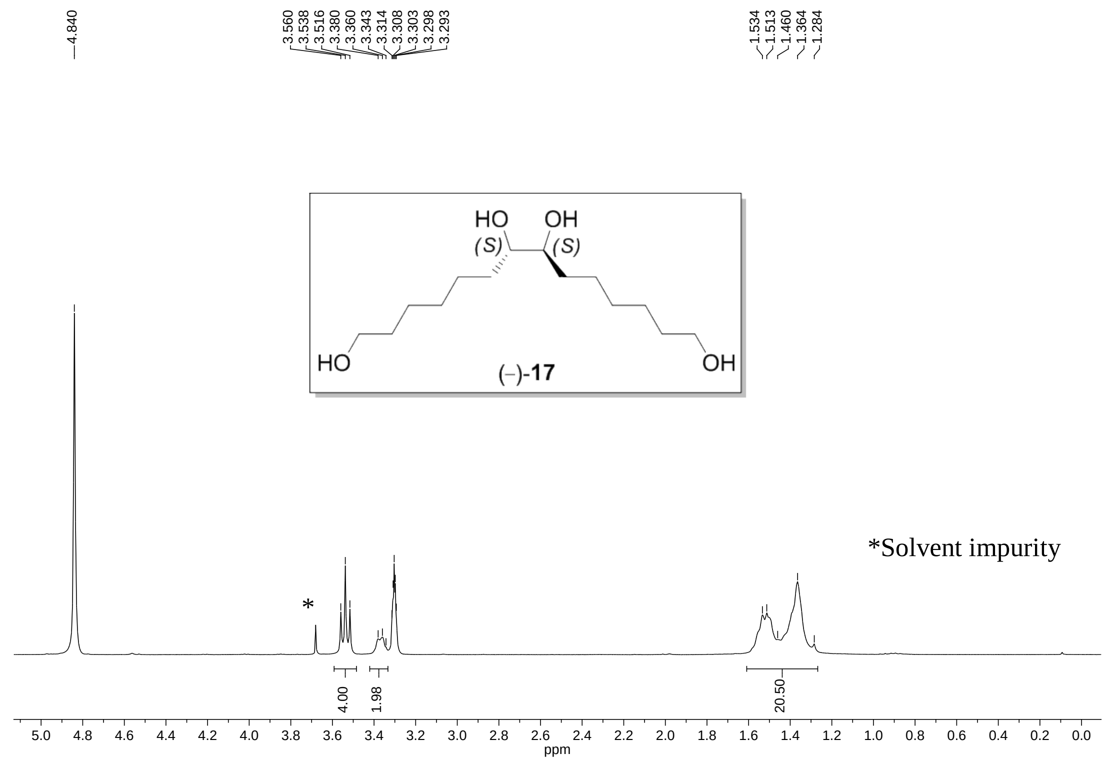
^{1}H NMR spectra (500 MHz, $CDCl_3$, 25°C) of **(–)-9c**



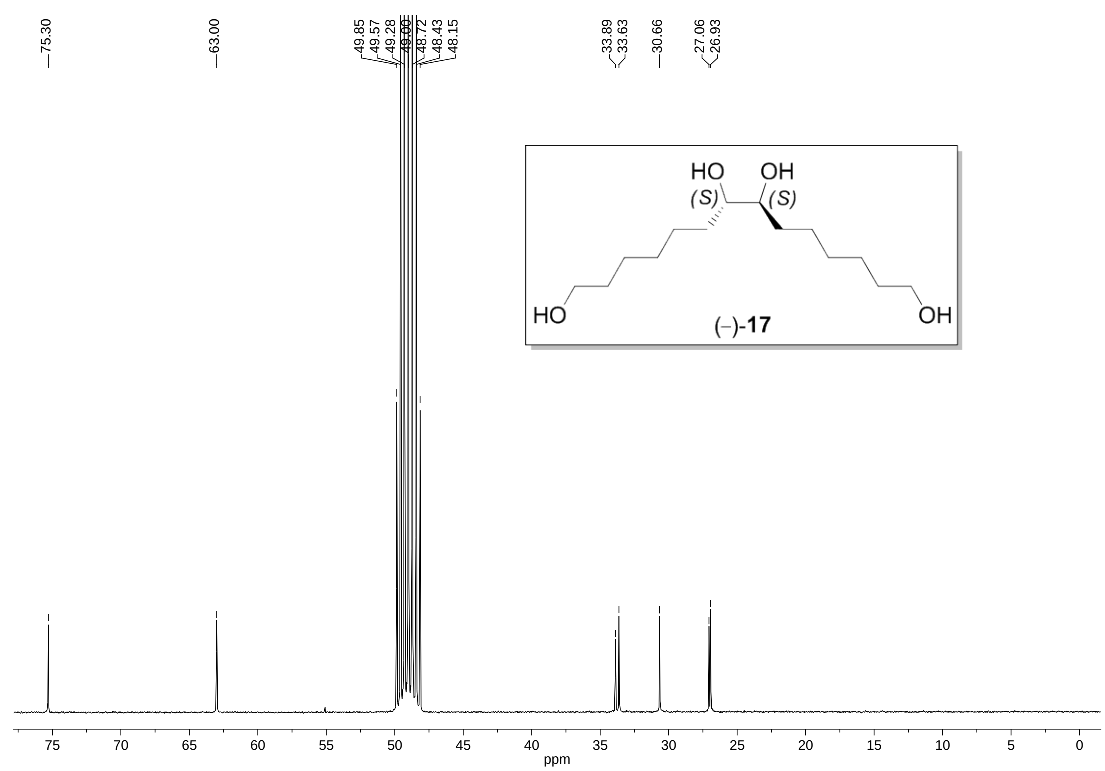
^{13}C NMR spectra (125 MHz, $CDCl_3$, 25°C) of **(–)-9b**



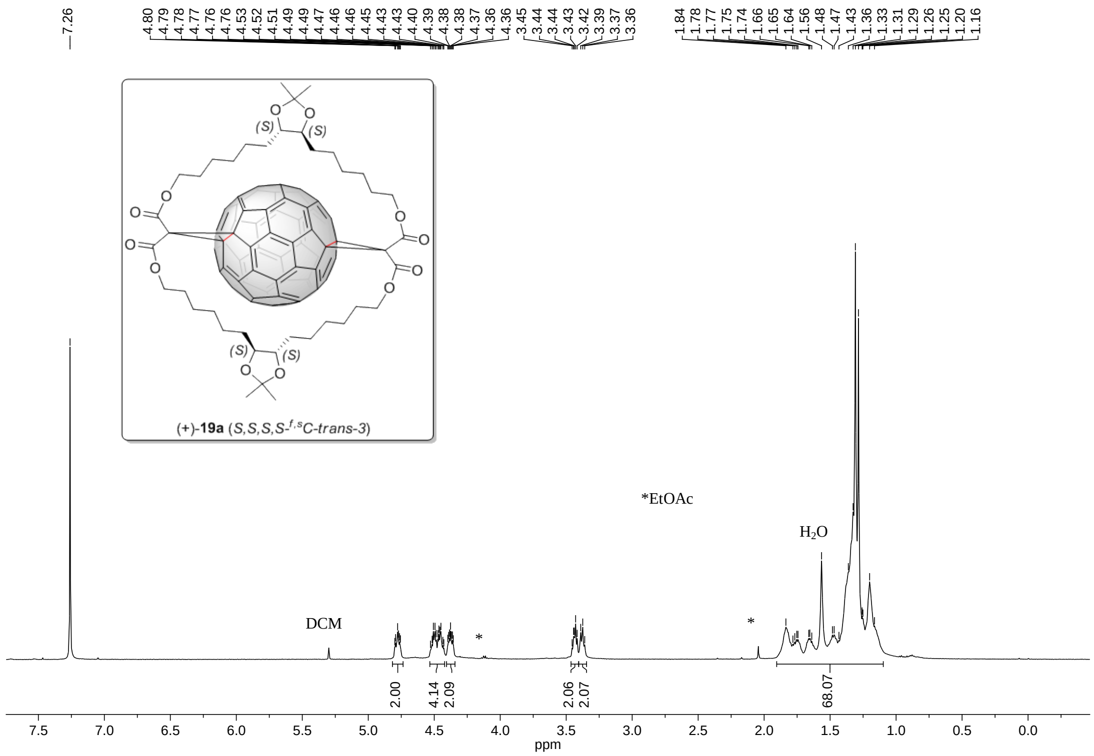
^{1}H NMR spectra (300 MHz, CD_3OD, 25°C) of **(–)-17**



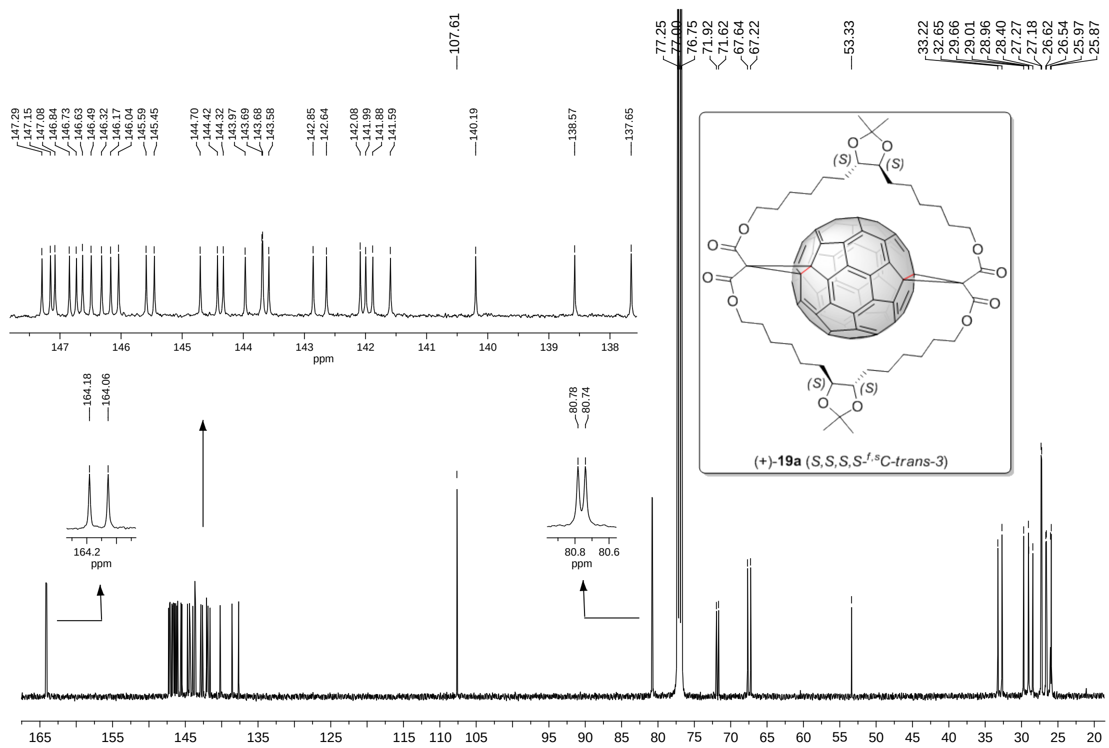
^{13}C NMR spectra (75 MHz, CD_3OD, 25°C) of **(–)-17**



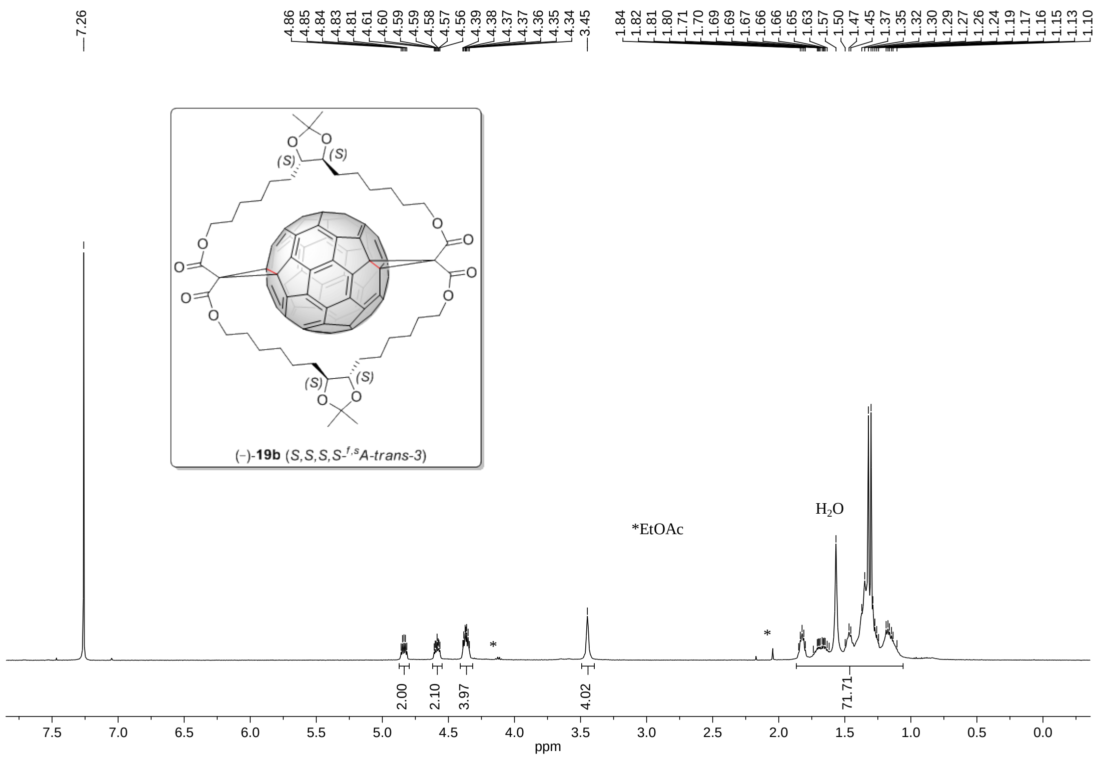
^{1}H NMR spectra (500 MHz, $CDCl_3$, 25°C) of **(+)-19a**



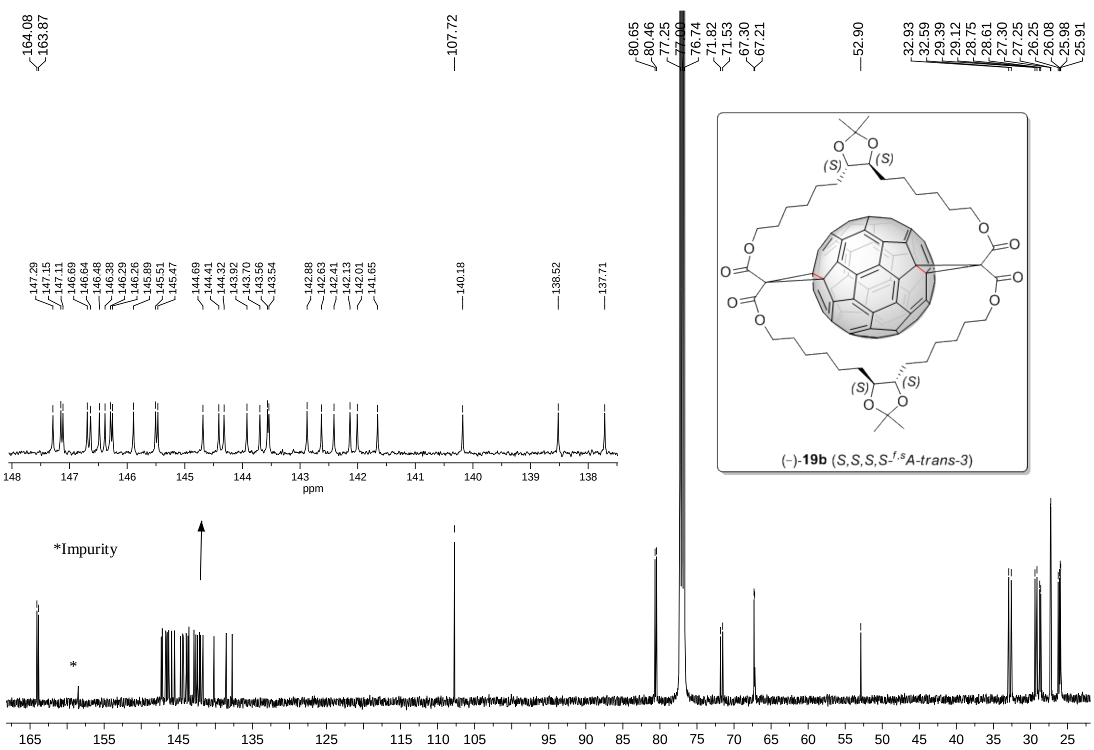
^{13}C NMR spectra (125 MHz, $CDCl_3$, 25°C) of **(+)-19a**



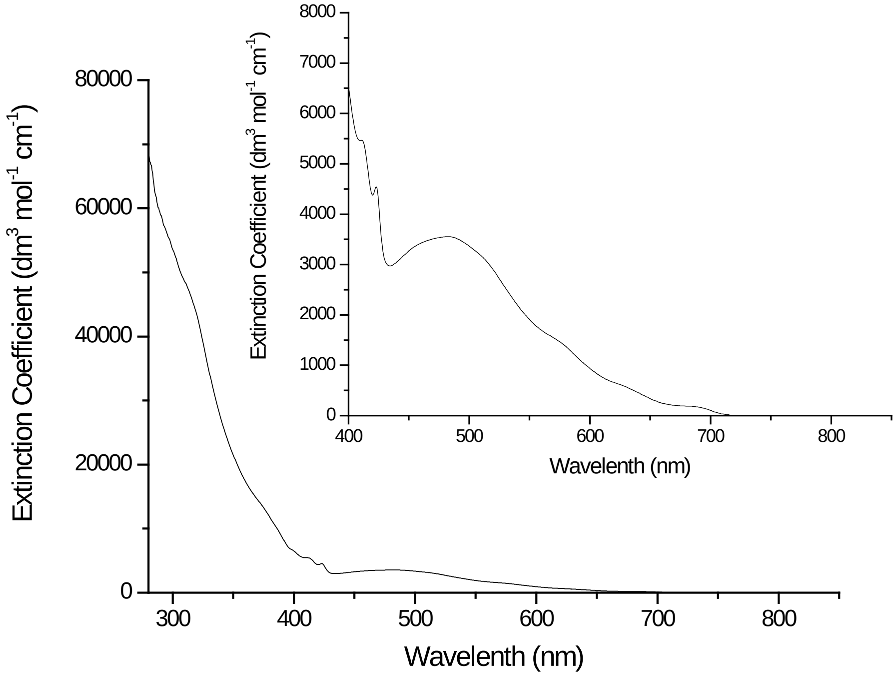
^{1}H NMR spectra (500 MHz, $CDCl_3$, 25°C) of **(–)-19b**



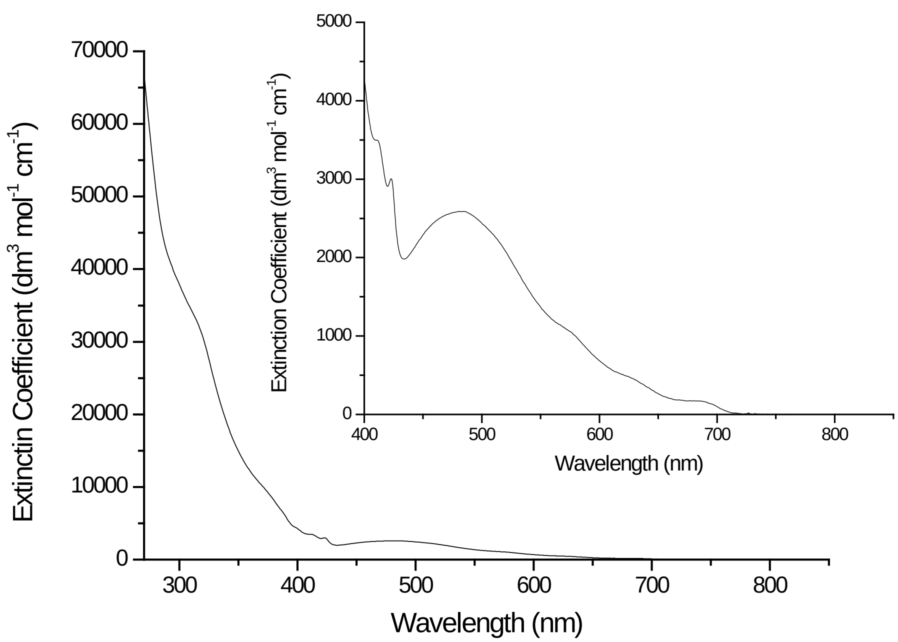
^{13}C NMR spectra (125 MHz, $CDCl_3$, 25°C) of **(–)-19b**



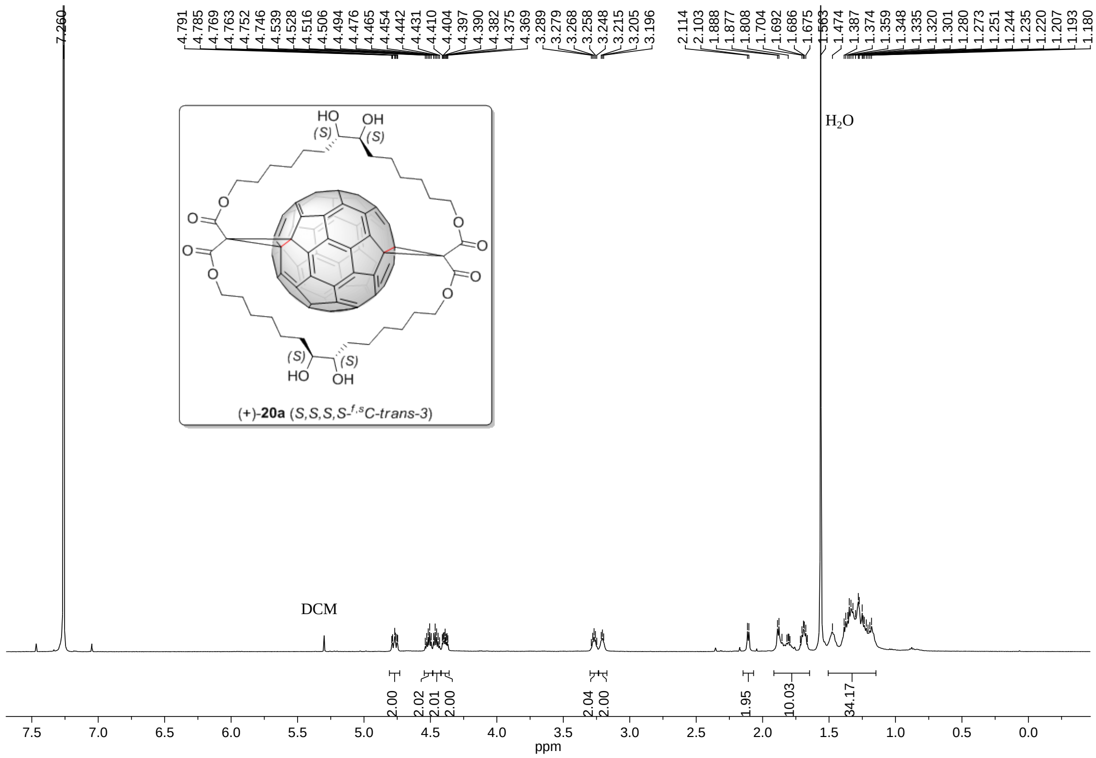
UV-Vis spectra ($CHCl_3$) of **(+)-19a**



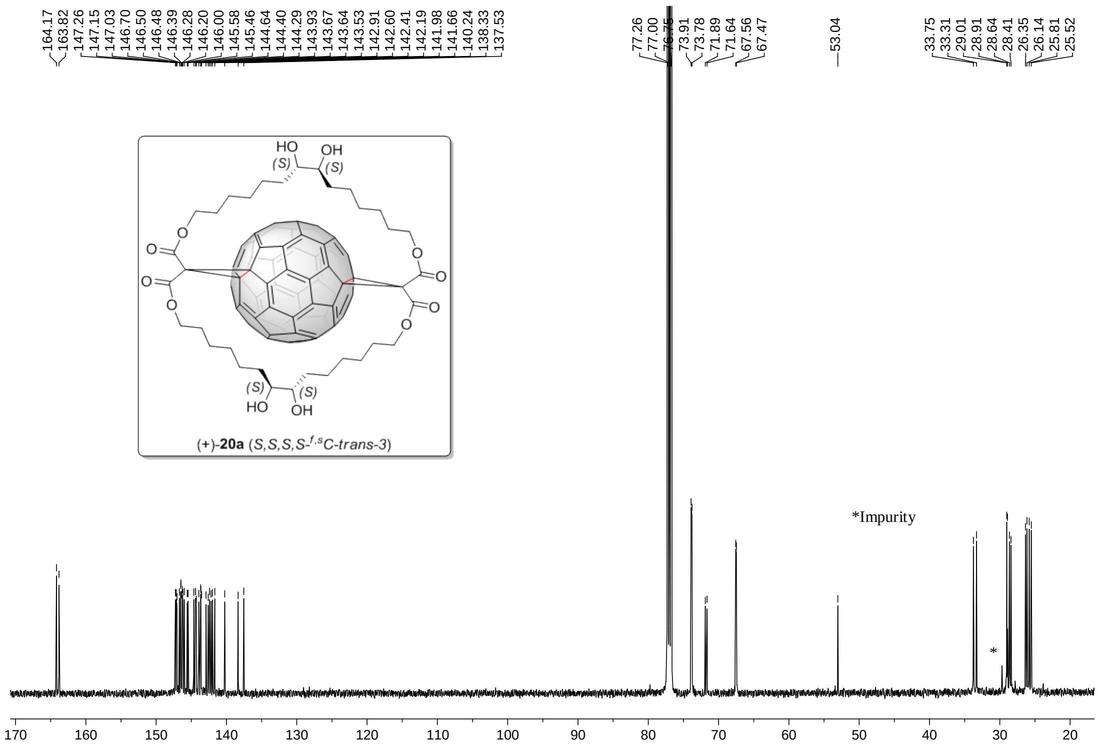
UV-Vis spectra ($CHCl_3$) of **(–)-19b**



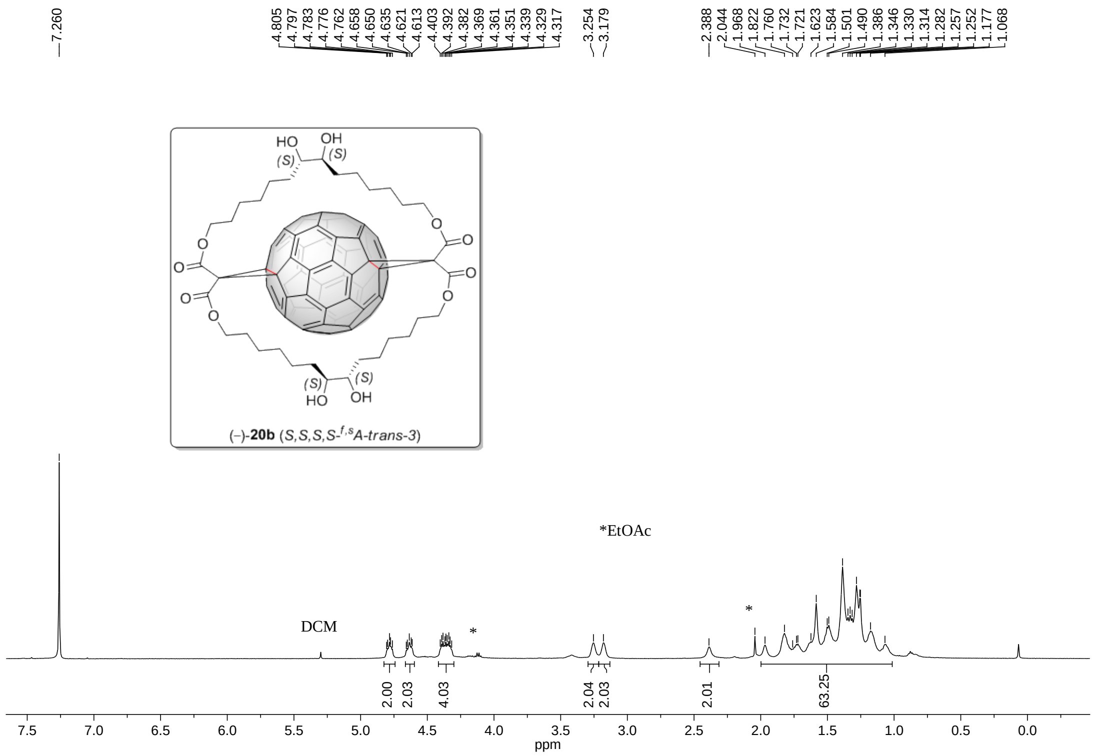
^{1}H NMR spectra (500 MHz, $CDCl_3$, 25°C) of **(+)-20a**



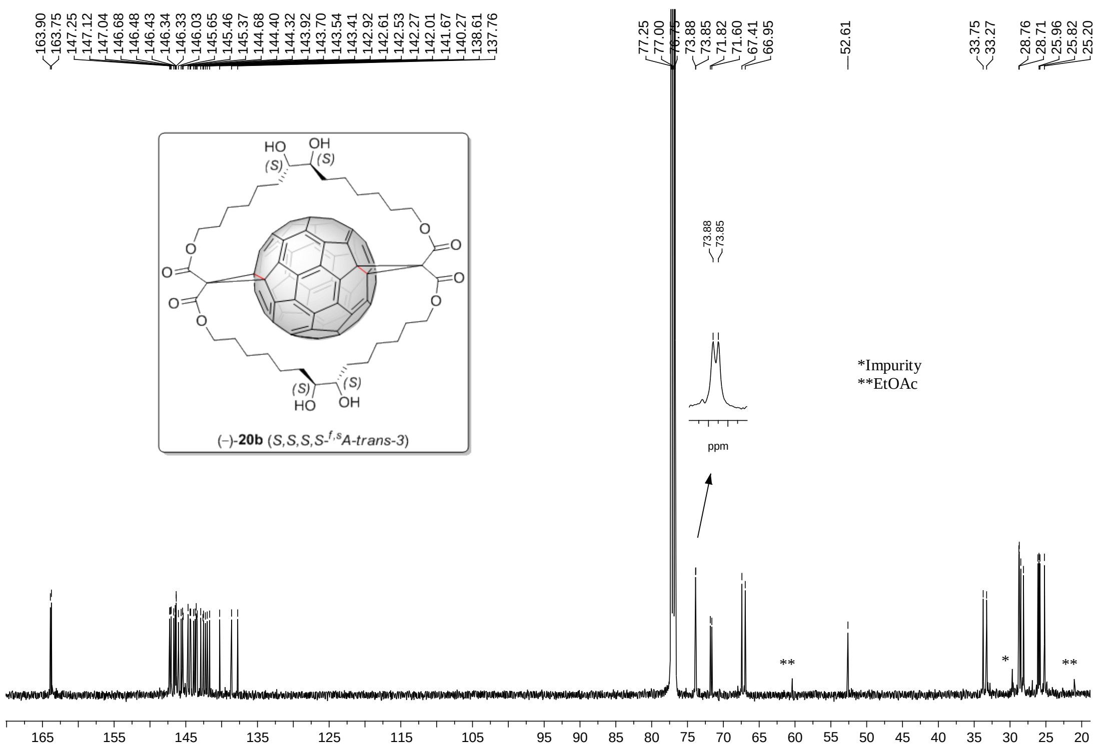
^{13}C NMR spectra (125 MHz, $CDCl_3$, 25°C) of **(+)-20a**



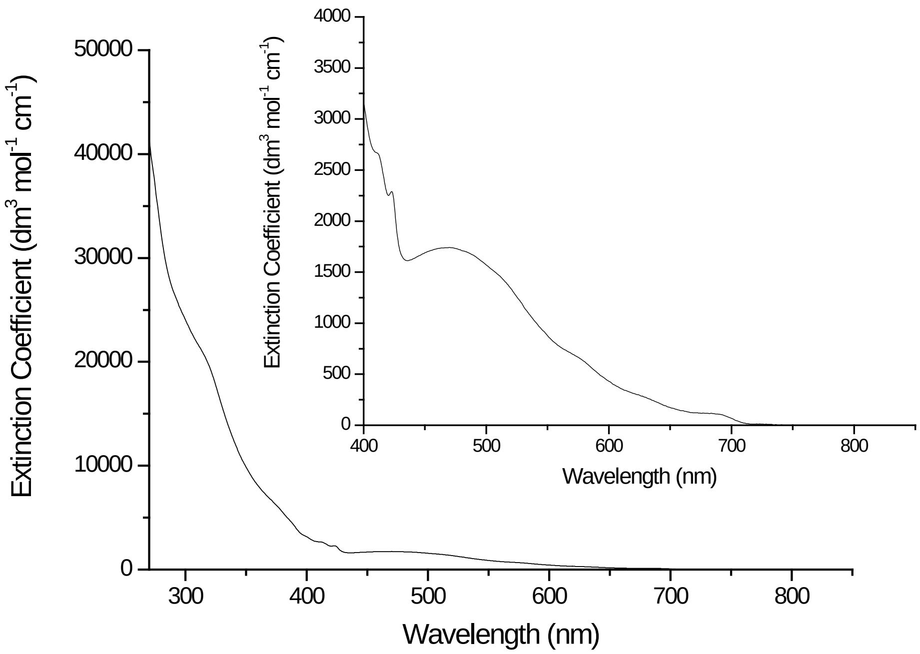
^{1}H NMR spectra (500 MHz, $CDCl_3$, 25°C) of **(–)-20b**



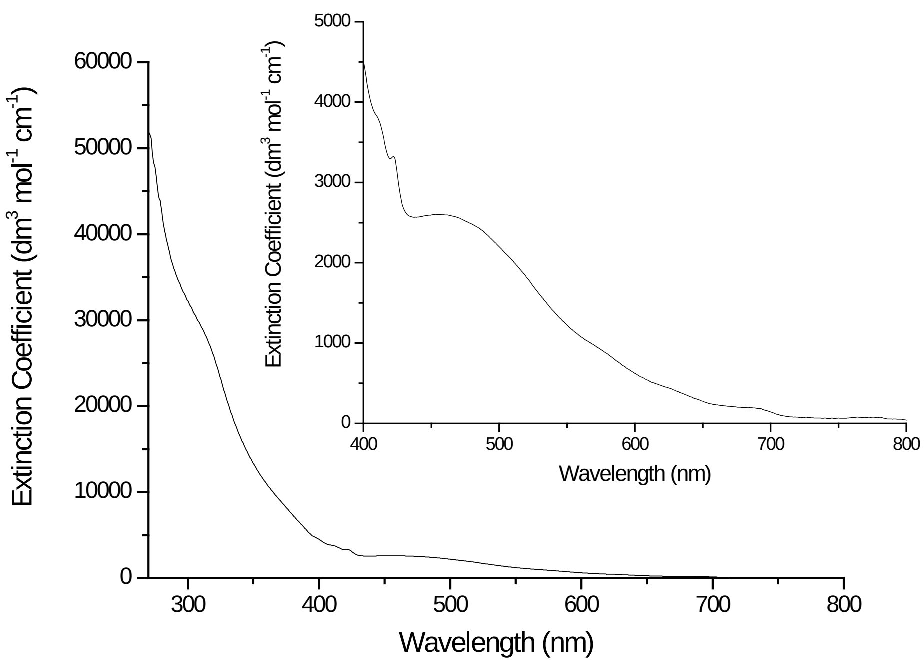
^{13}C NMR spectra (125 MHz, $CDCl_3$, 25°C) of **(–)-20b**



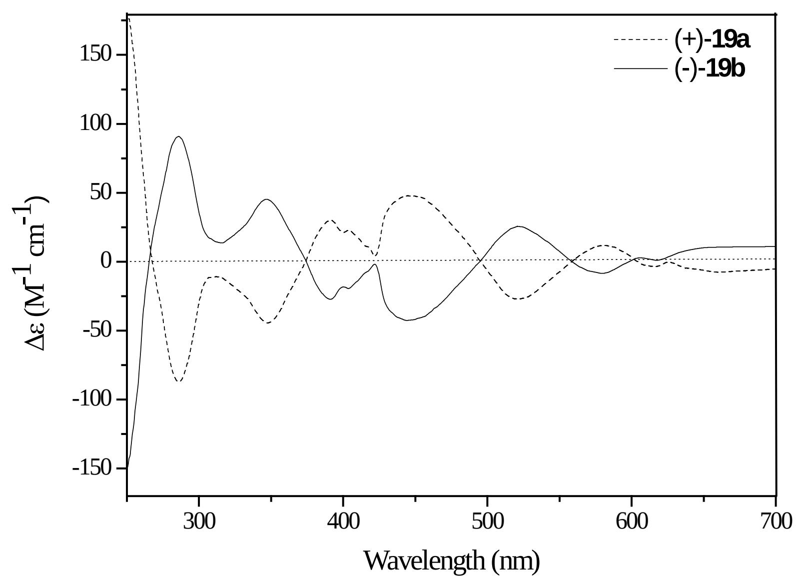
UV-Vis spectra ($CHCl_3$) of **(+)-20a**



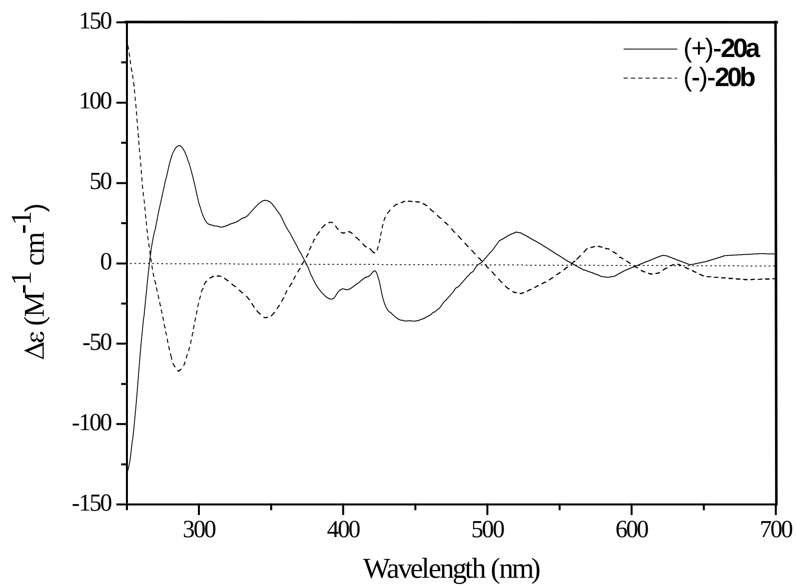
UV-Vis spectra ($CHCl_3$) of **(–)-20b**



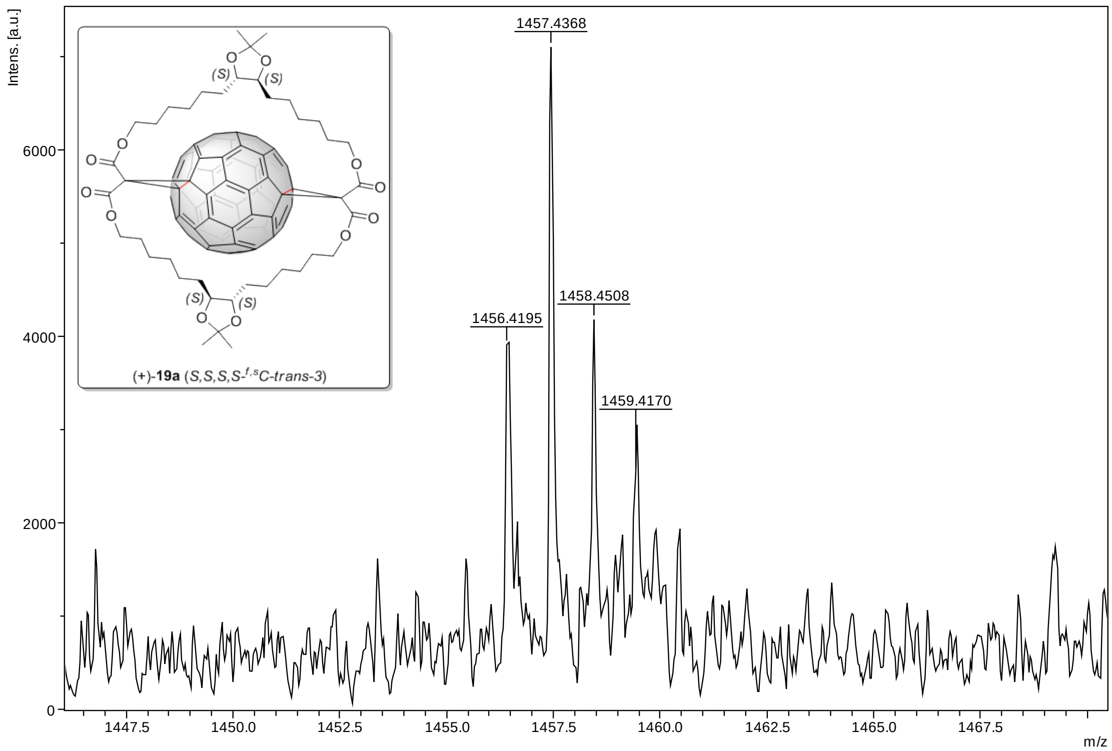
CD spectra ($CHCl_3$) of **(+)-19a** and **(–)-19b**



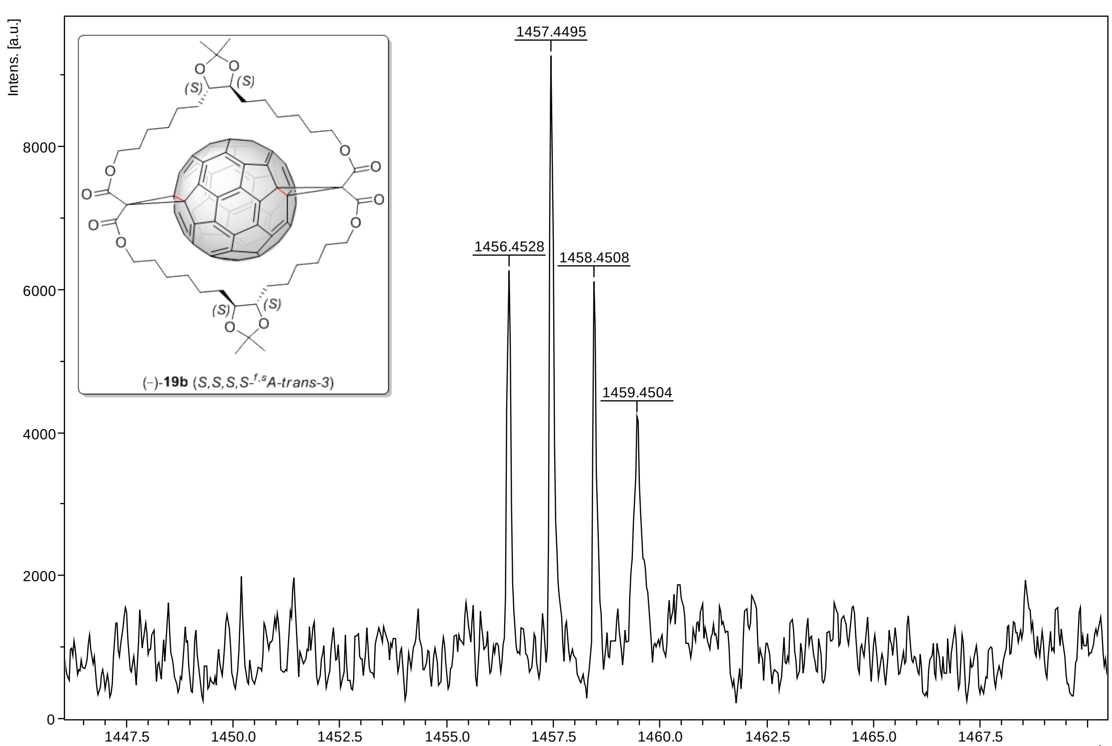
CD spectra ($CHCl_3$) of **(+)-20a** and **(–)-20b**



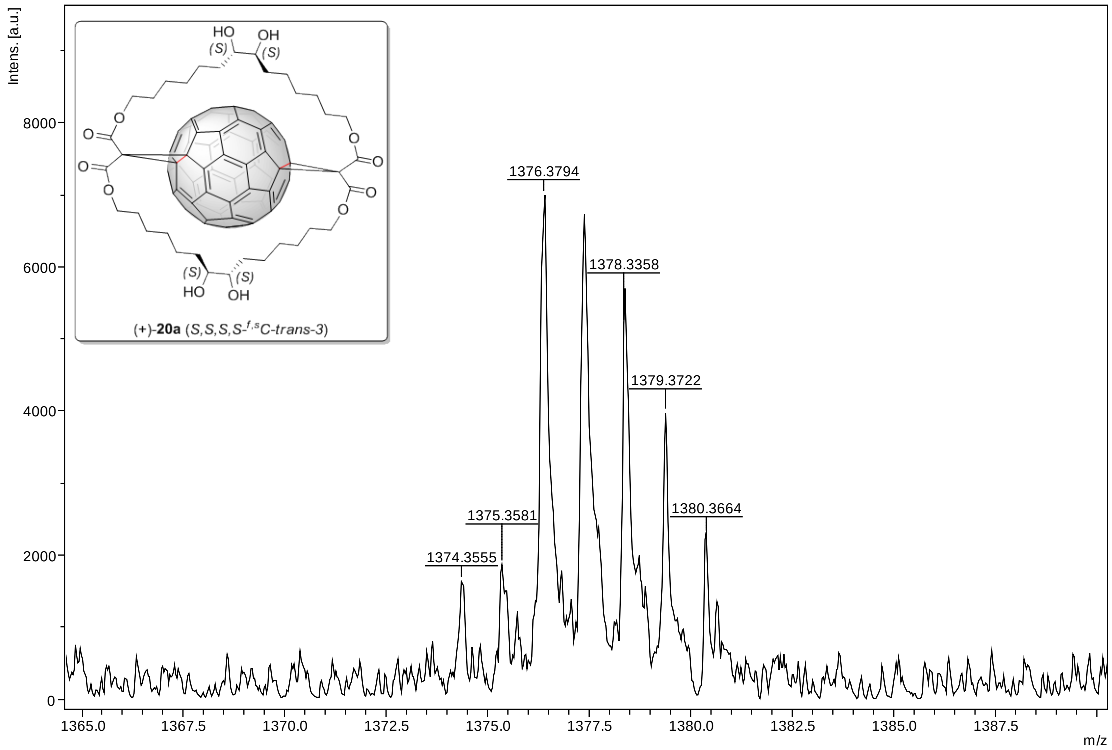
High resolution MALDI TOF spectra (negative mode, matrix DCTB) of **(+)-19a**



High resolution MALDI TOF spectra (negative mode, matrix DCTB) of **(–)-19b**



High resolution MALDI TOF spectra (negative mode, matrix DCTB) of **(+)-20a**



High resolution MALDI TOF spectra (negative mode, matrix DCTB) of **(–)-20b**