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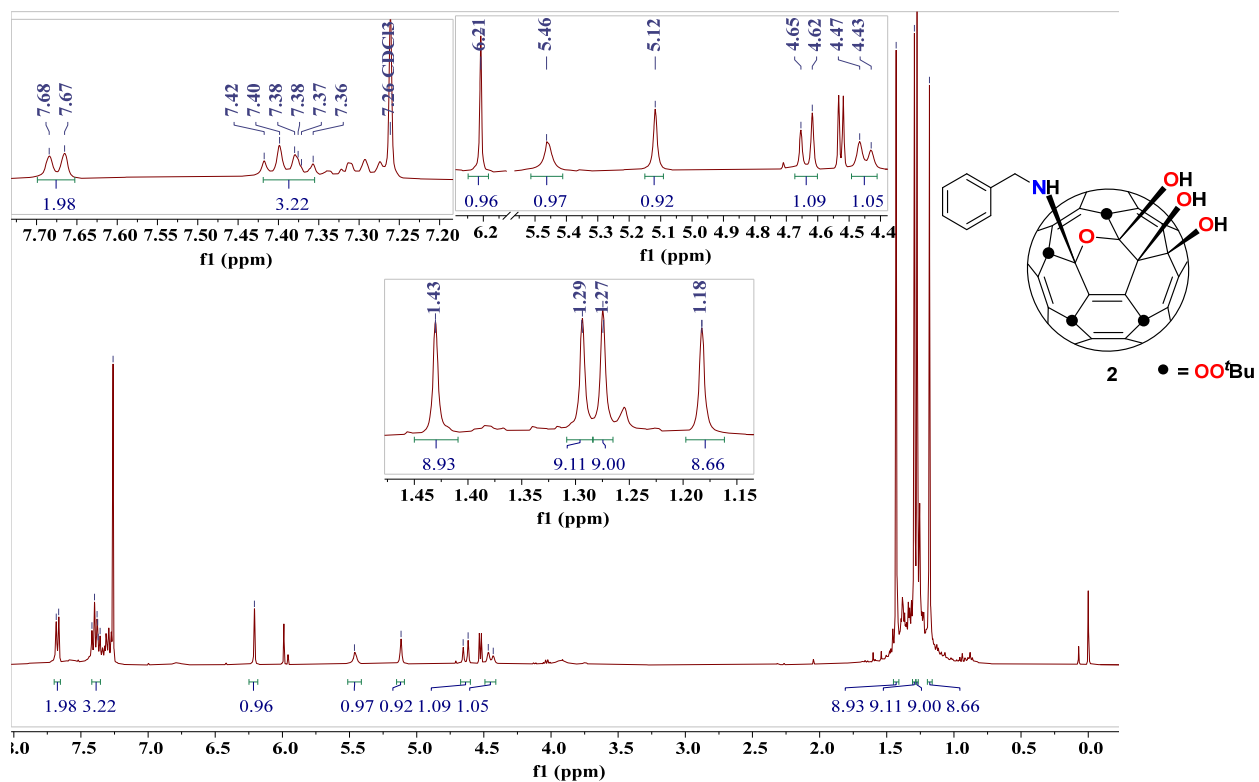


Figure S1 ^1H NMR spectrum of **2** (in CDCl_3)

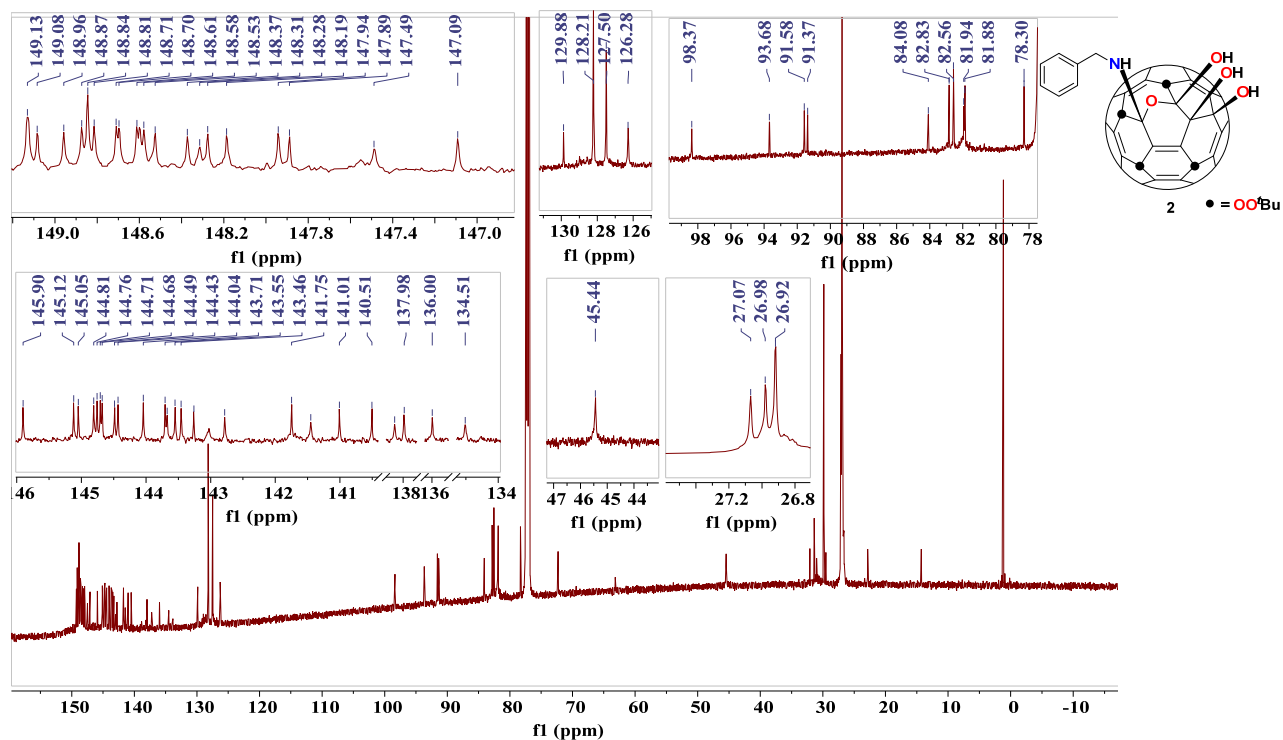


Figure S2 ^{13}C NMR spectrum of **2** (in CDCl_3)

Peking University Mass Spectrometry Sample Analysis Report

Analysis Info

Analysis Name FTMS-24020060_Pos_20240227_000009.d
 Sample 5ba
 Comment

Acquisition Date 2/27/2024 6:29:58 PM
 Instrument Bruker Solarix XR FTMS
 Operator Peking University

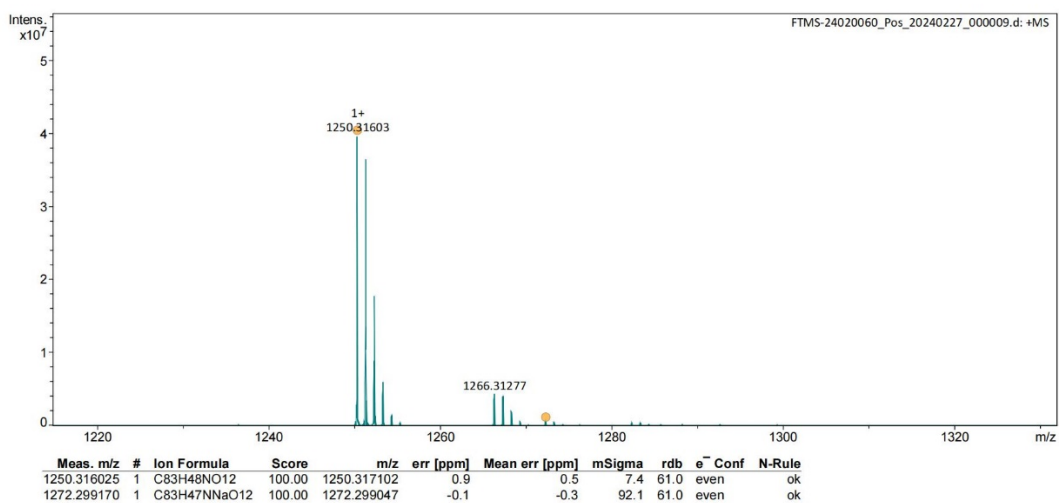


Figure S3 Mass spectrum of **2**

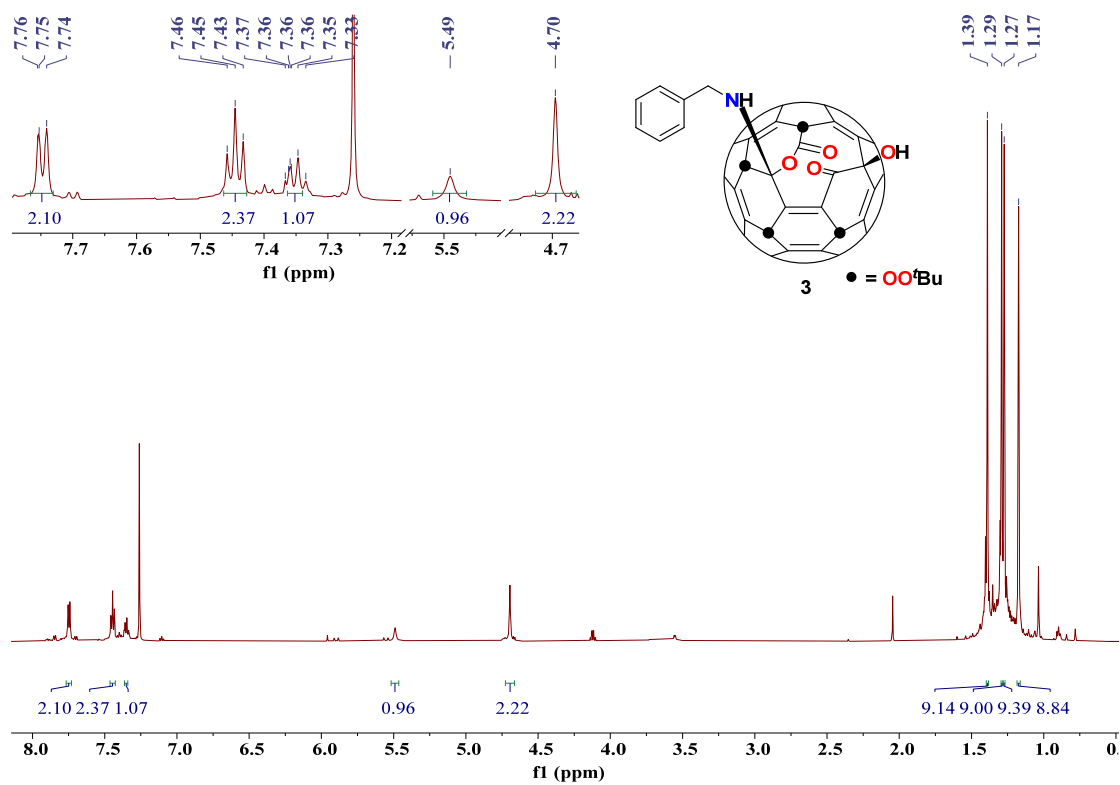


Figure S4 ¹H NMR spectrum of **3** (in CDCl₃)

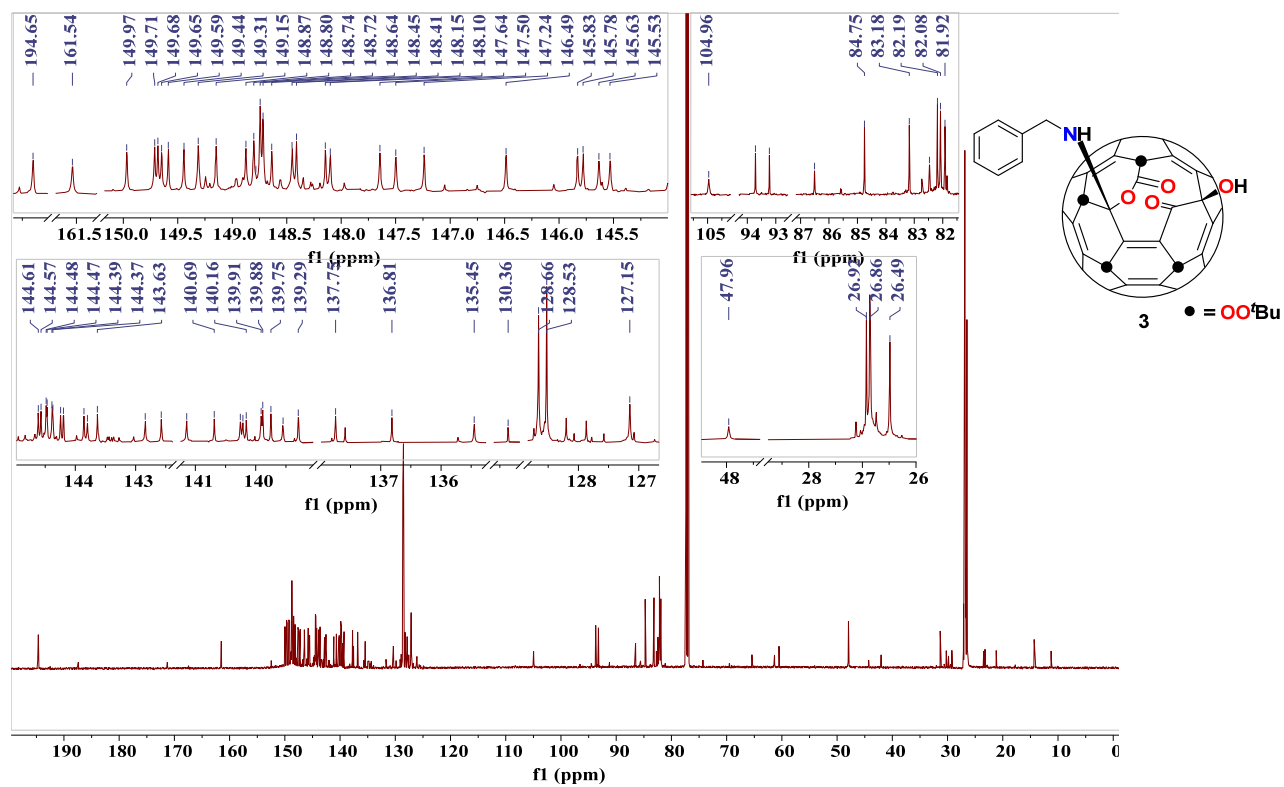


Figure S5 ^{13}C NMR spectrum of **3** (in CDCl_3)

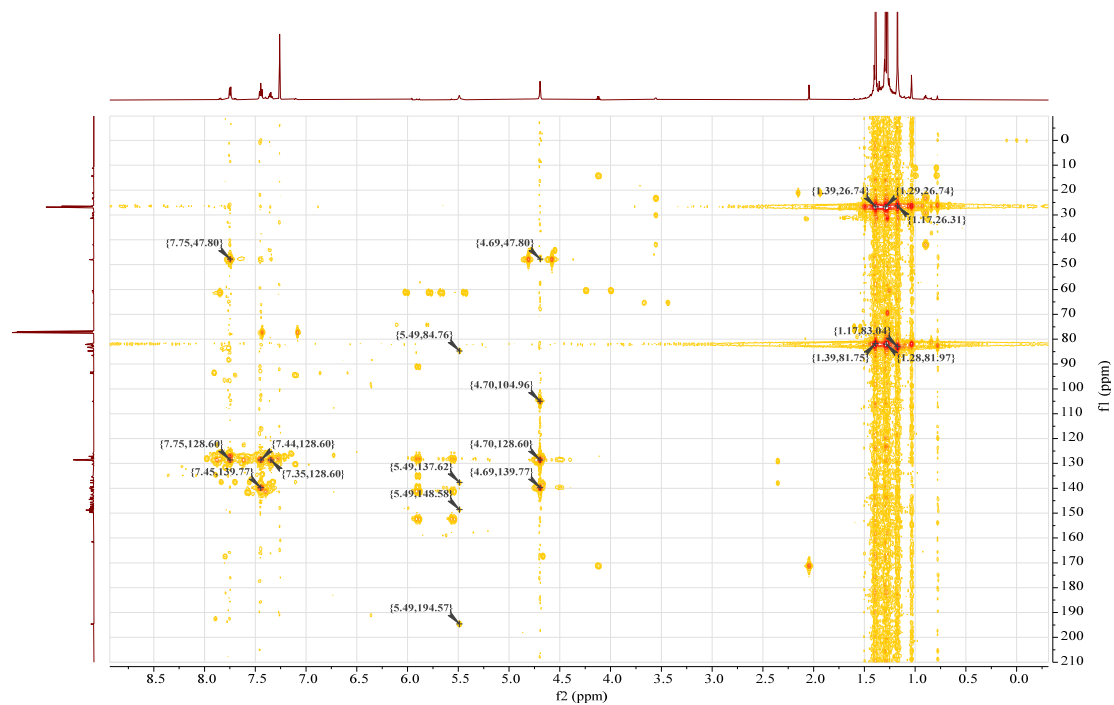


Figure S6 HMBC NMR spectrum of **3** (in CDCl_3)

Peking University Mass Spectrometry Sample Analysis Report

Analysis Info

Analysis Name FTMS-23100086_Pos_20231016_000003.d
 Sample 7
 Comment

Acquisition Date 10/16/2023 5:23:37 PM
 Instrument Bruker Solarix XR FTMS
 Operator Peking University

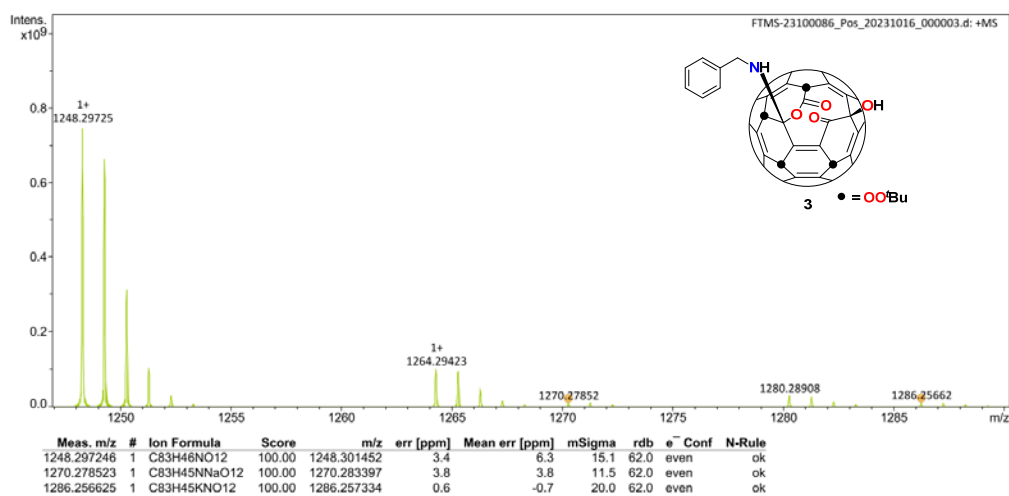


Figure S7 Mass spectrum of **3**

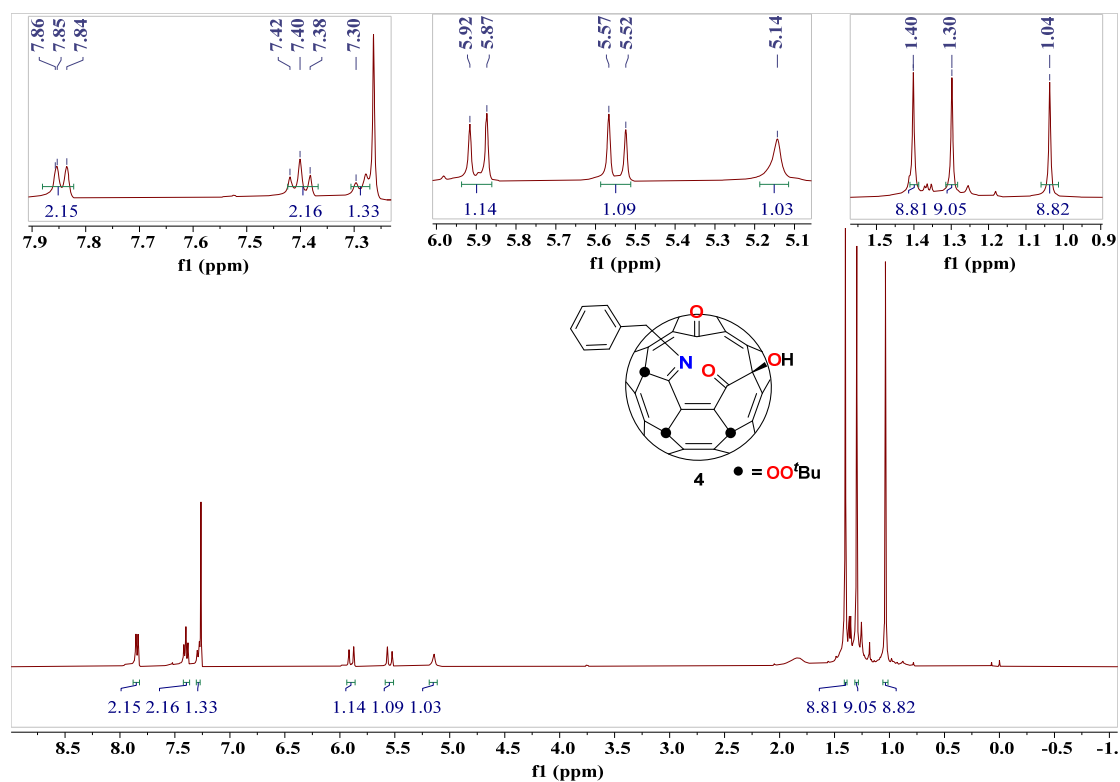


Figure S8 ¹H NMR spectrum of **4** (in CDCl₃)

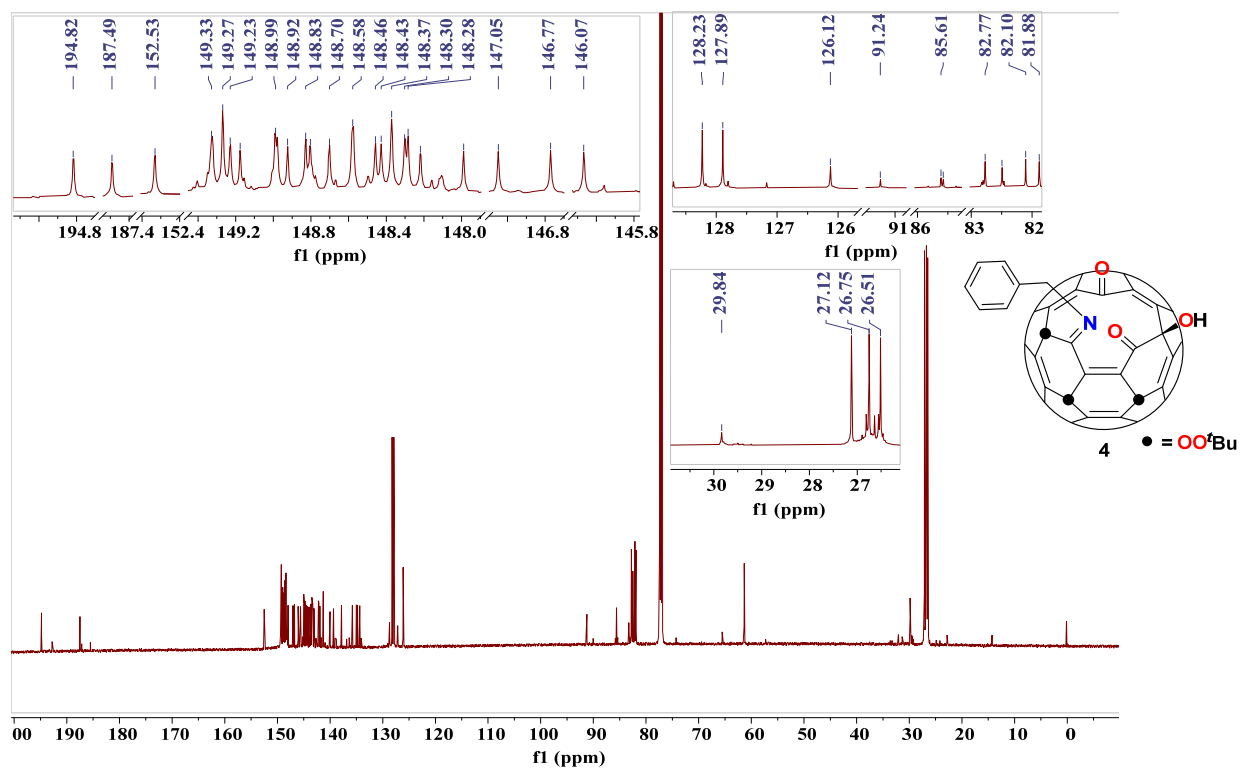


Figure S9 ^{13}C NMR spectrum of **4** (in CDCl_3)

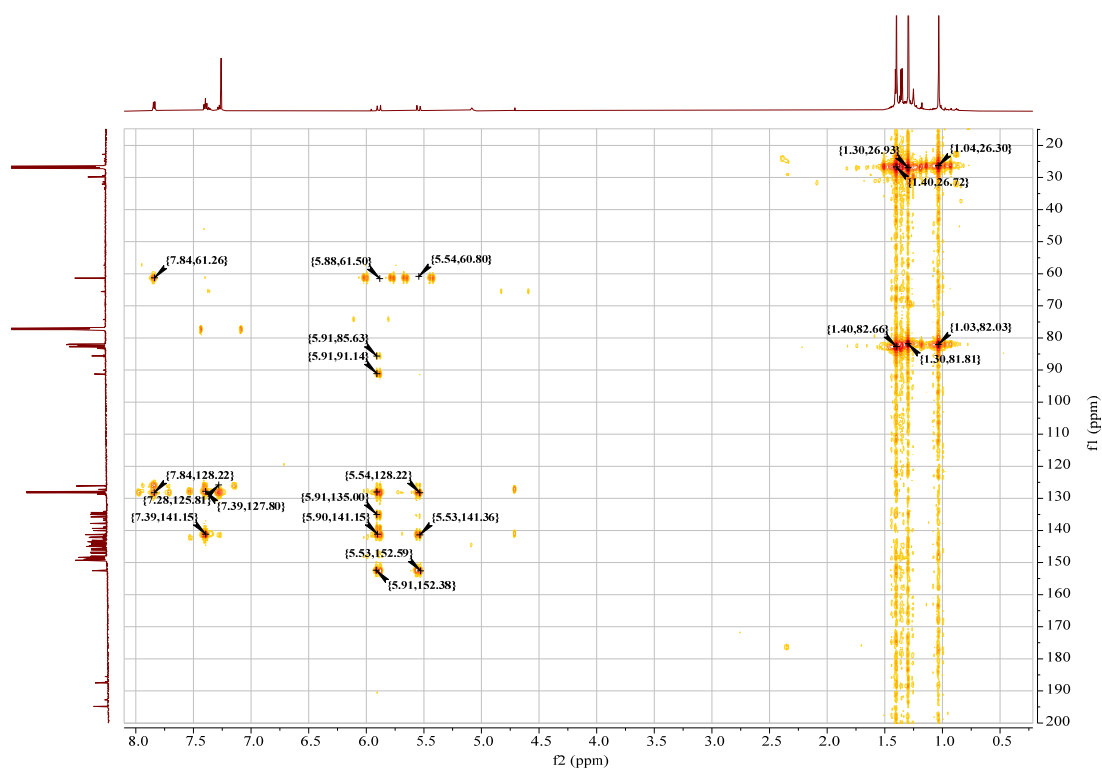


Figure S10 HMBC NMR spectrum of **4** (in CDCl_3)

Peking University Mass Spectrometry Sample Analysis Report

Analysis Info

Analysis Name FTMS-23080047_Pos_20230809_000011.d
 Sample 8
 Comment

Acquisition Date 8/10/2023 5:17:21 PM
 Instrument Bruker Solarix XR FTMS
 Operator Peking University

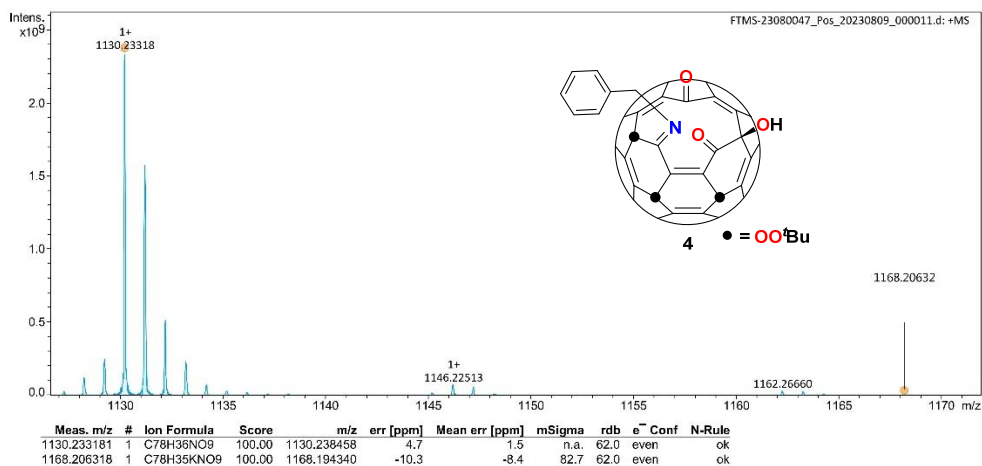


Figure S11 Mass spectrum of **4** (in CDCl₃)

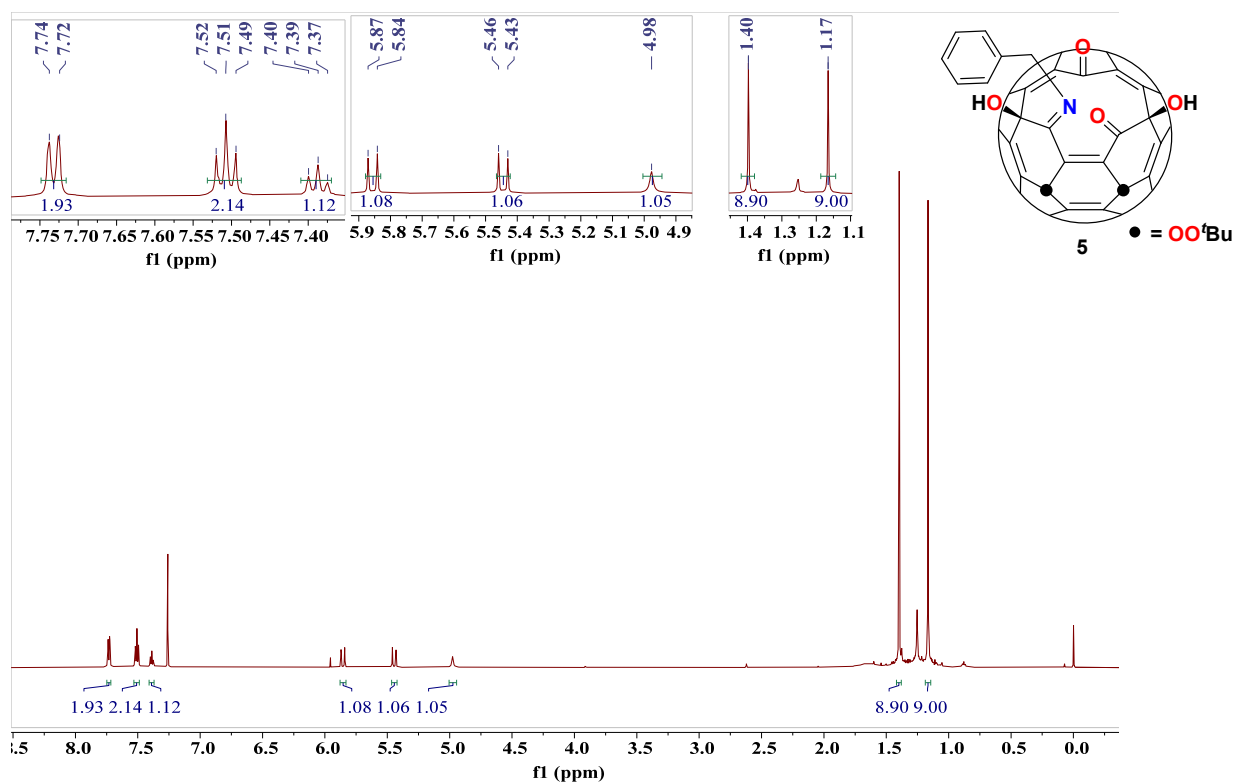


Figure S12 ¹H NMR spectrum of **5** (in CDCl₃)

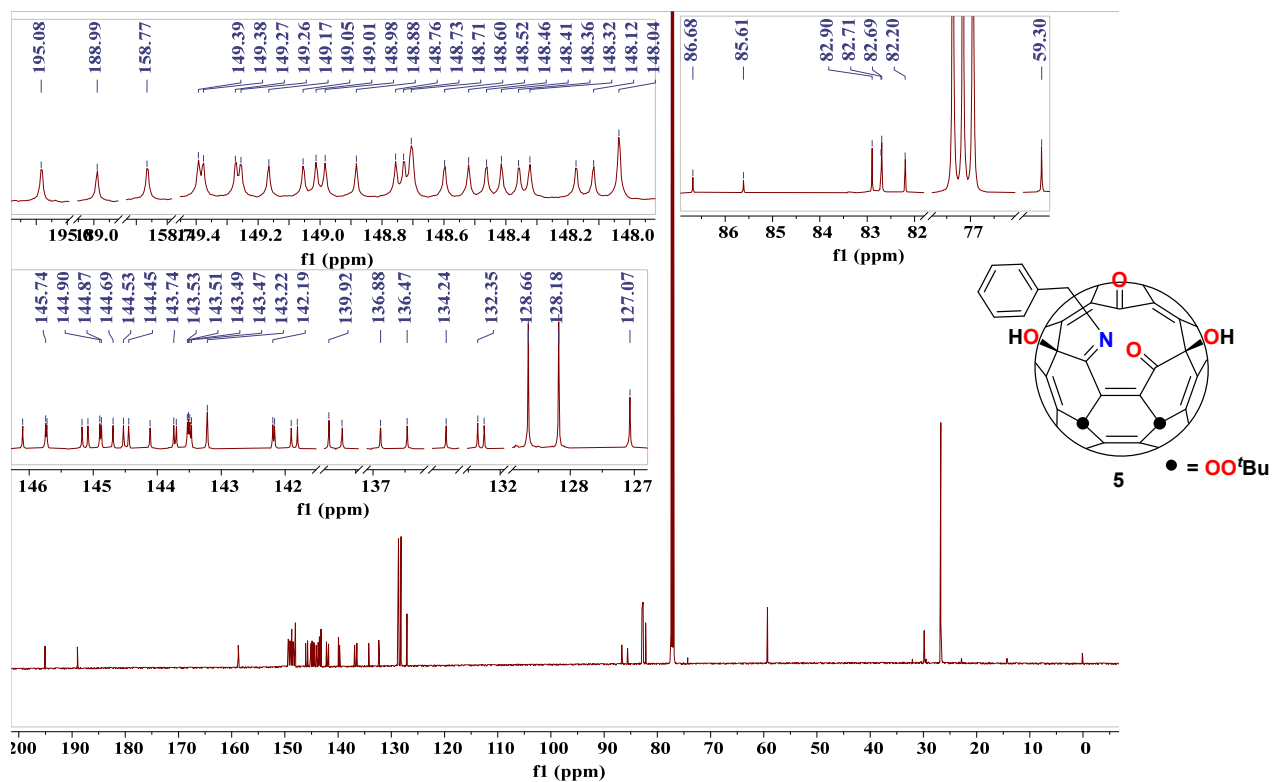


Figure S13 ^{13}C NMR spectrum of **5** (in CDCl_3)

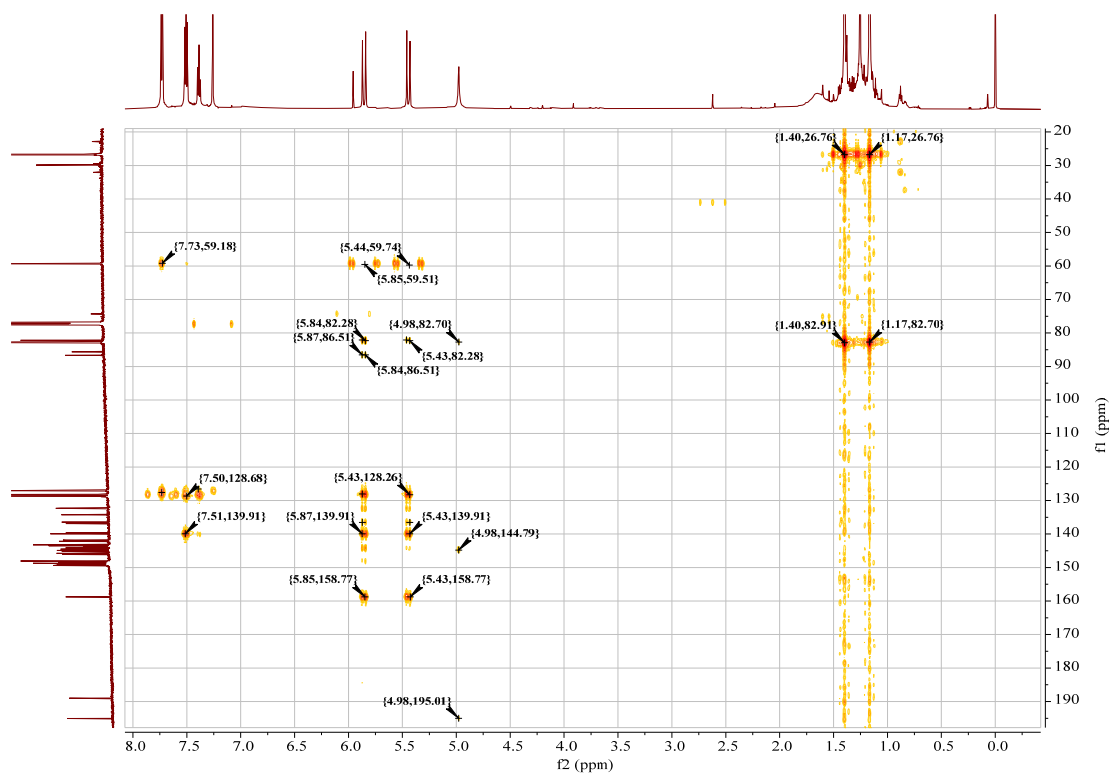


Figure S14 HMBC NMR spectrum of **5**

Peking University Mass Spectrometry Sample Analysis Report

Analysis Info

Analysis Name
Sample
Comment

FTMS-23080084_Pos_20230816_000005.d
9

Acquisition Date
Instrument
Operator

8/16/2023 7:17:13 PM
Bruker Solarix XR FTMS
Peking University

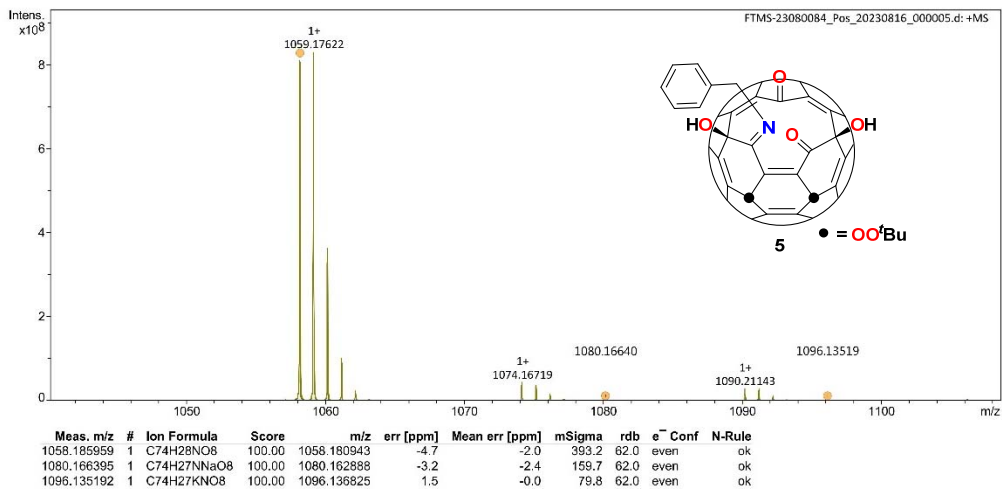


Figure S15 Mass spectrum of **5**

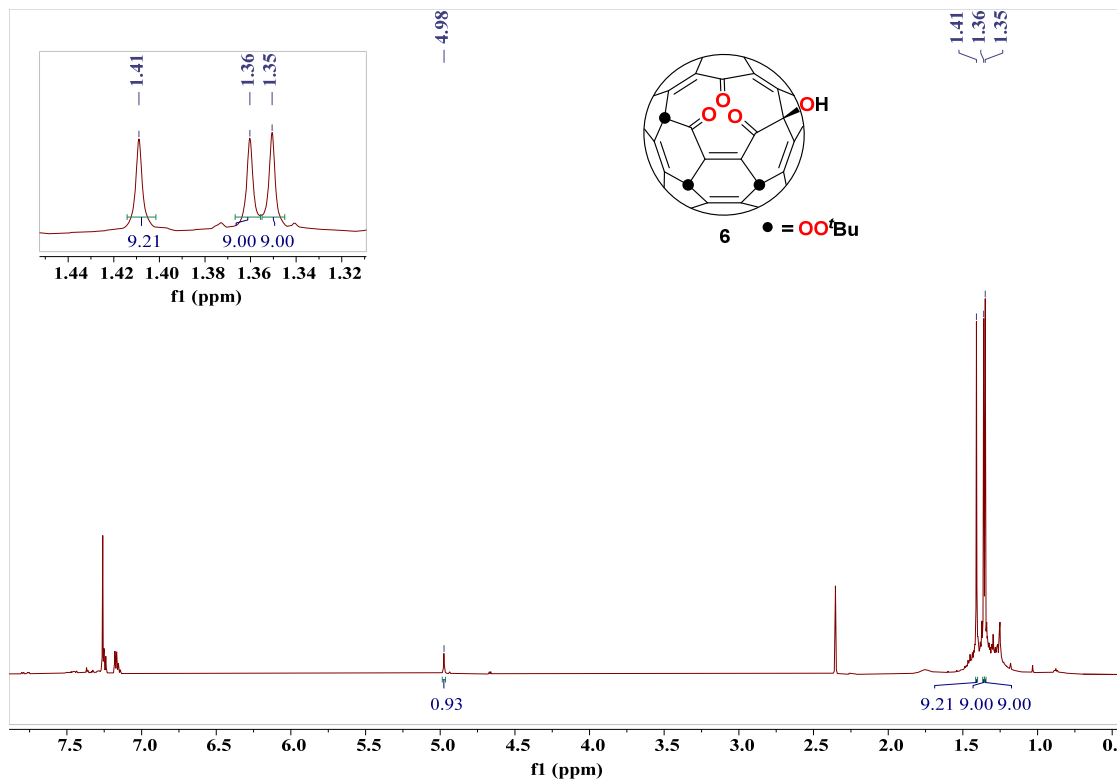


Figure S16 ¹H NMR spectrum of **6** (in CDCl₃)

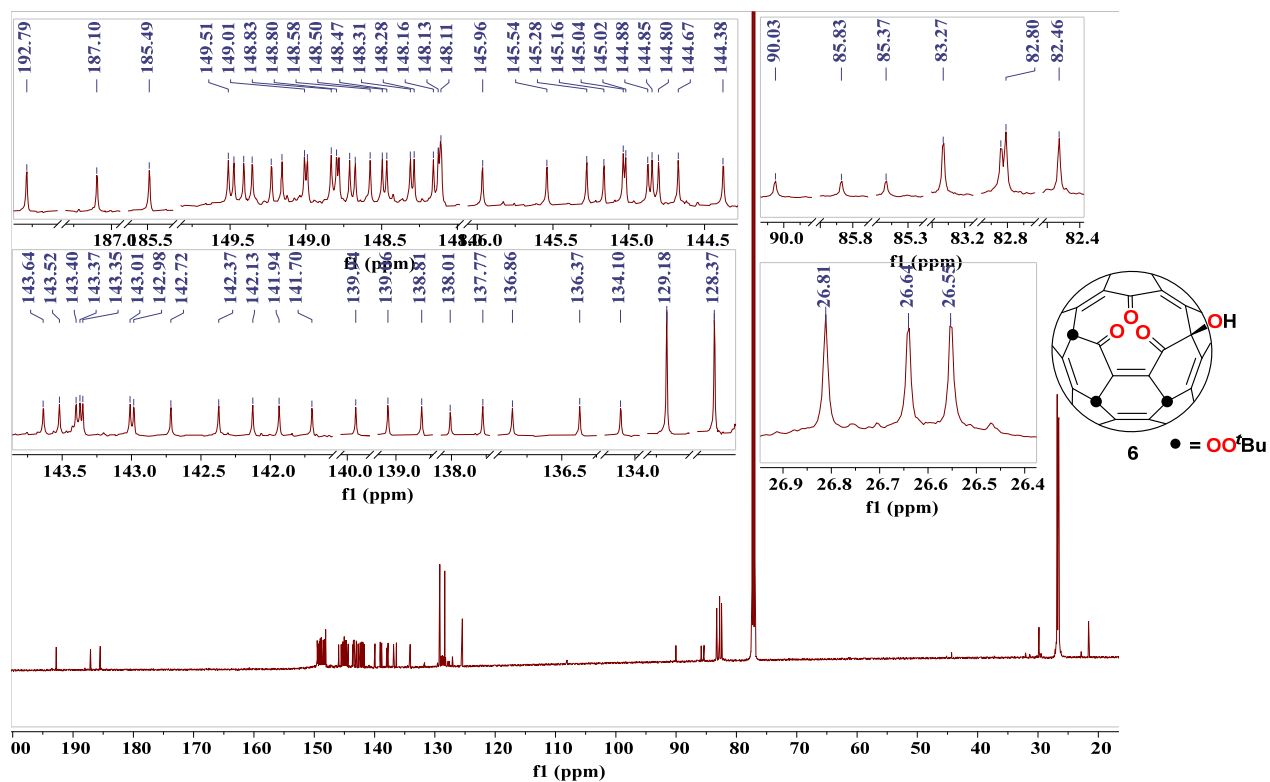


Figure S17 ^{13}C NMR spectrum of **6** (in CDCl_3)

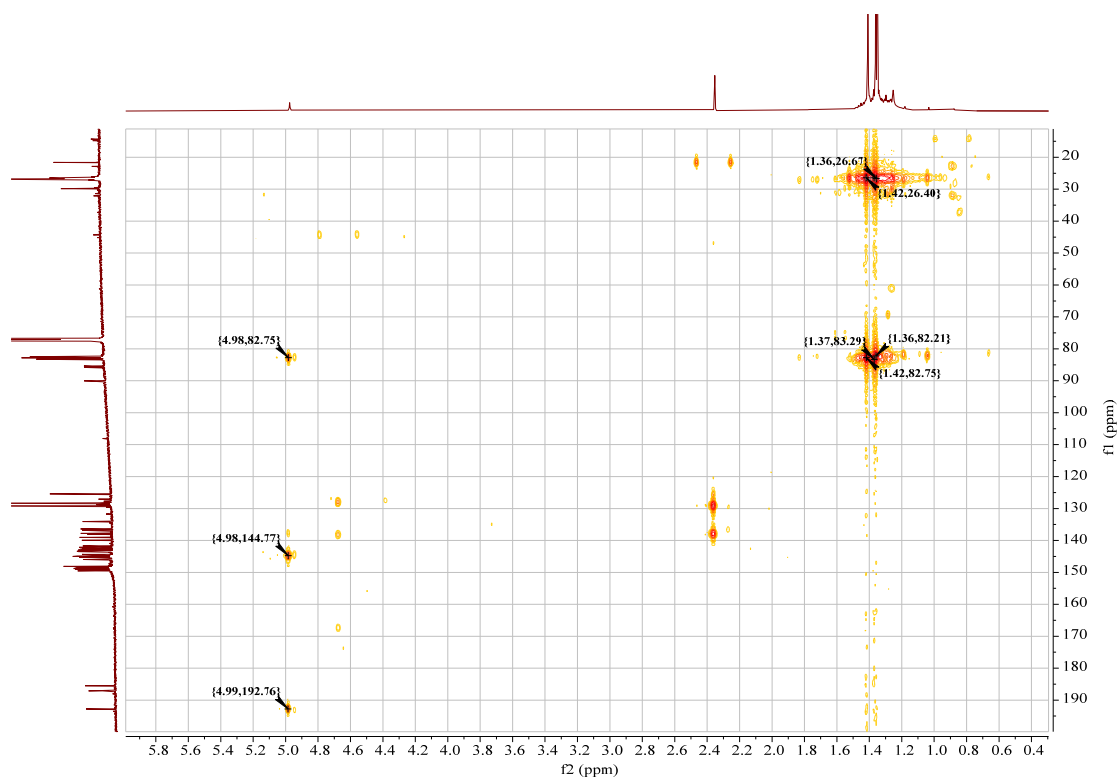


Figure S18 HMBC NMR spectrum of **6** (in CDCl_3)

Peking University Mass Spectrometry Sample Analysis Report

Analysis Info

Analysis Name FTMS-23090115_Pos_20230915_000002.d
 Sample 10
 Comment

Acquisition Date 9/15/2023 9:52:31 PM
 Instrument Bruker Solarix XR FTMS
 Operator Peking University

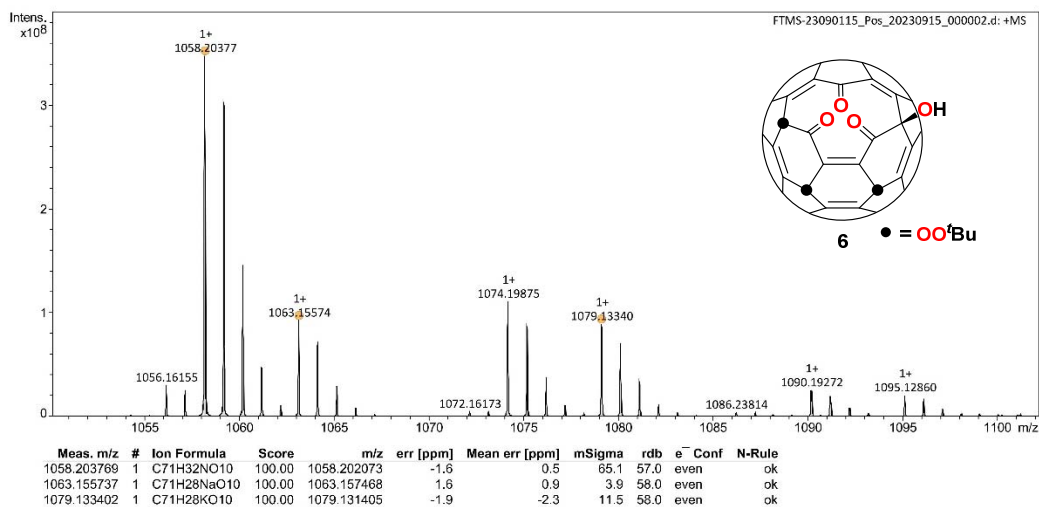


Figure S19 Mass spectrum of **6**

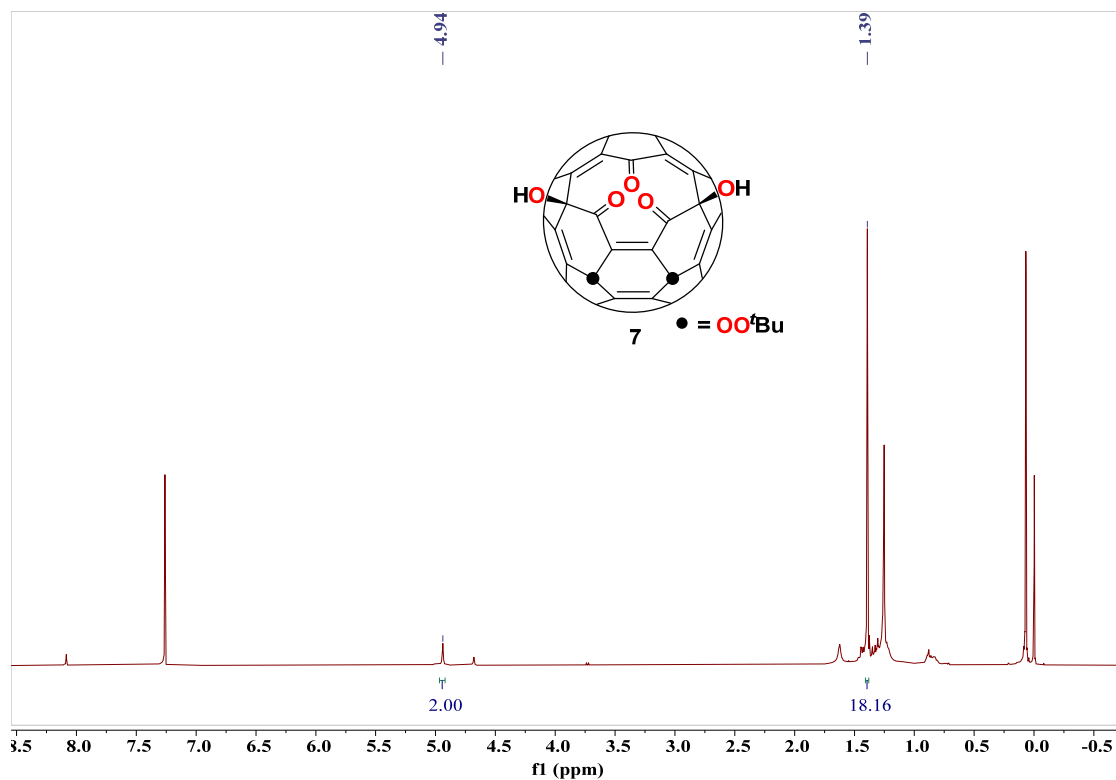


Figure S20 ¹H NMR spectrum of **7** (in CDCl₃)

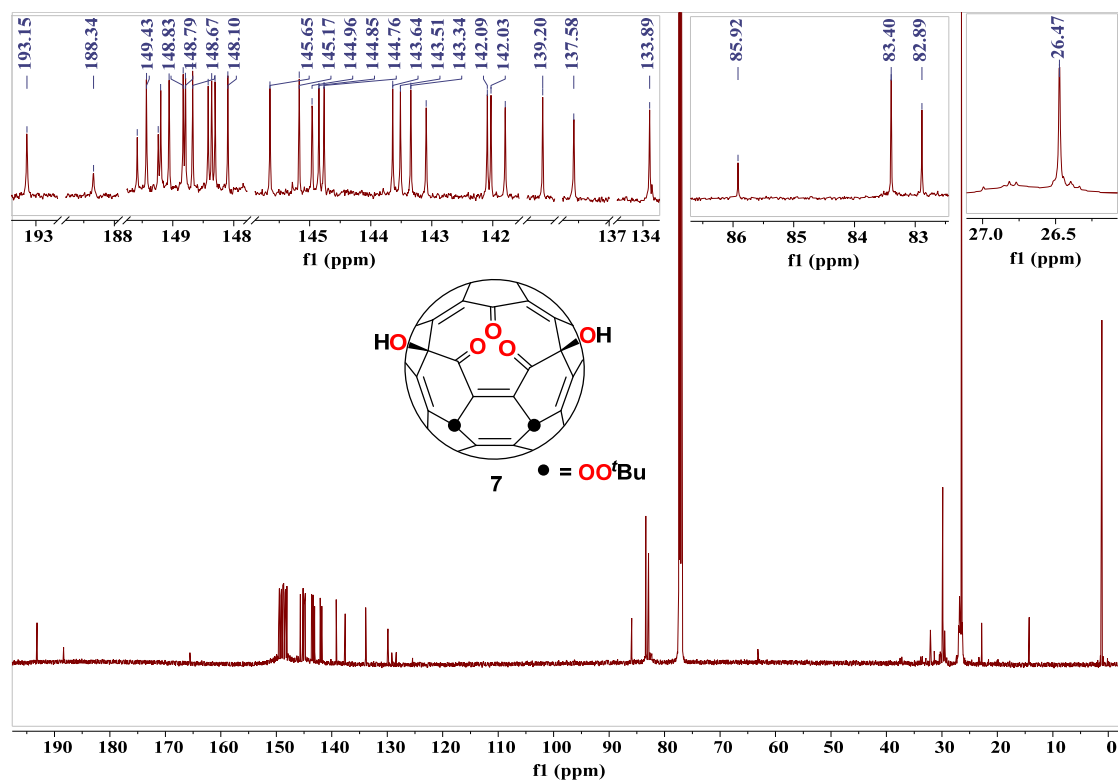


Figure S21 ^{13}C NMR spectrum of **7** (in CDCl_3)

Peking University Mass Spectrometry Sample Analysis Report

Analysis Info FTMS-23120273_Pos_20231229_000005.d
Analysis Name 11
Sample
Comment C59(OOC4H9)2O3(OH)2
Acquisition Date 12/29/2023 5:57:07 PM
Instrument Bruker Solarix XR FTMS
Operator Peking University

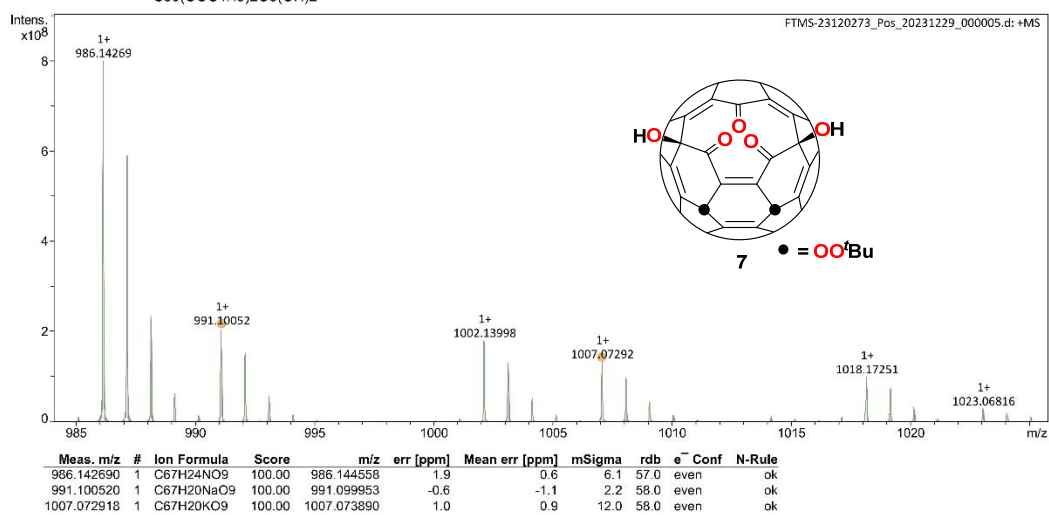


Figure S22 Mass spectrum of **7**

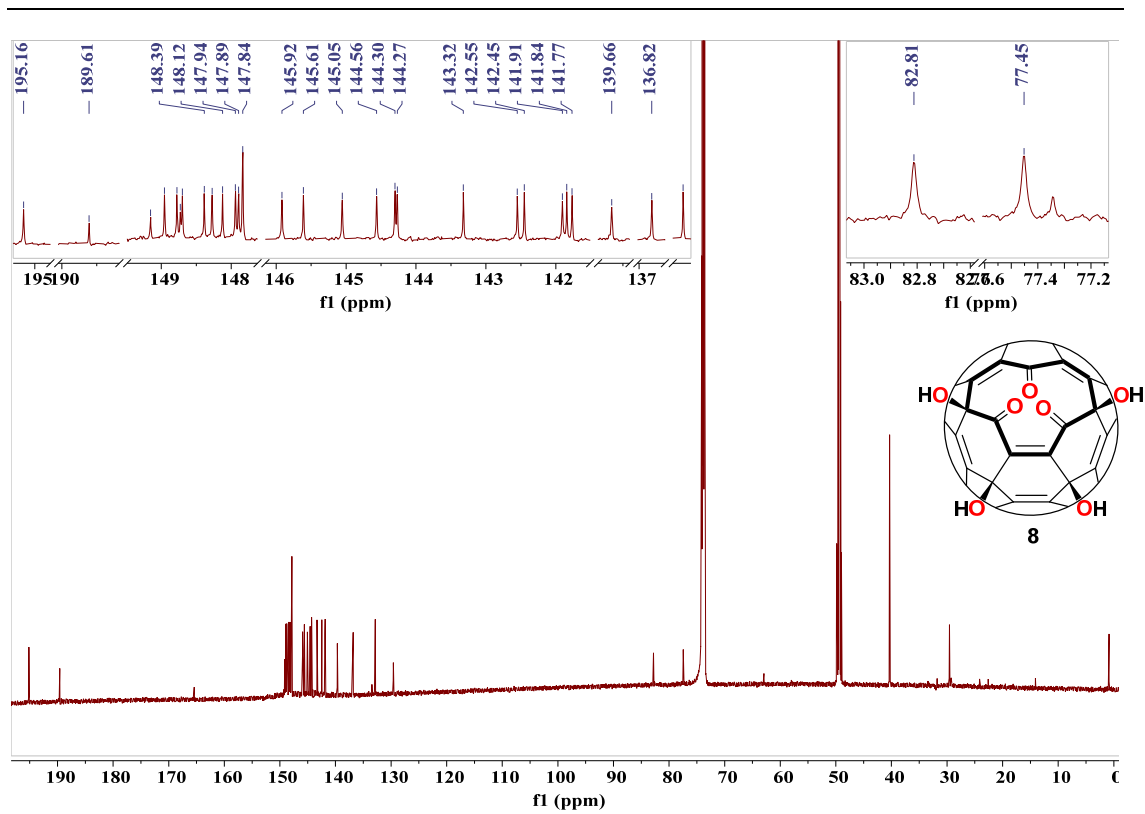


Figure S23 ^{13}C NMR spectrum of **8** (in $\text{C}_2\text{D}_2\text{Cl}_4:\text{CD}_3\text{OD} = 50:1$)

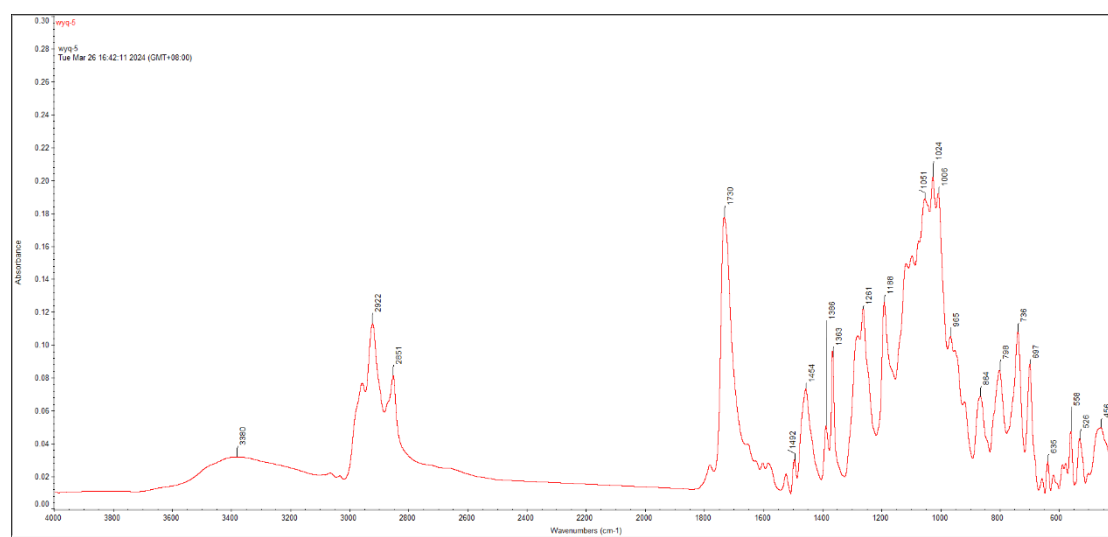


Figure S24 IR spectrum of **5**

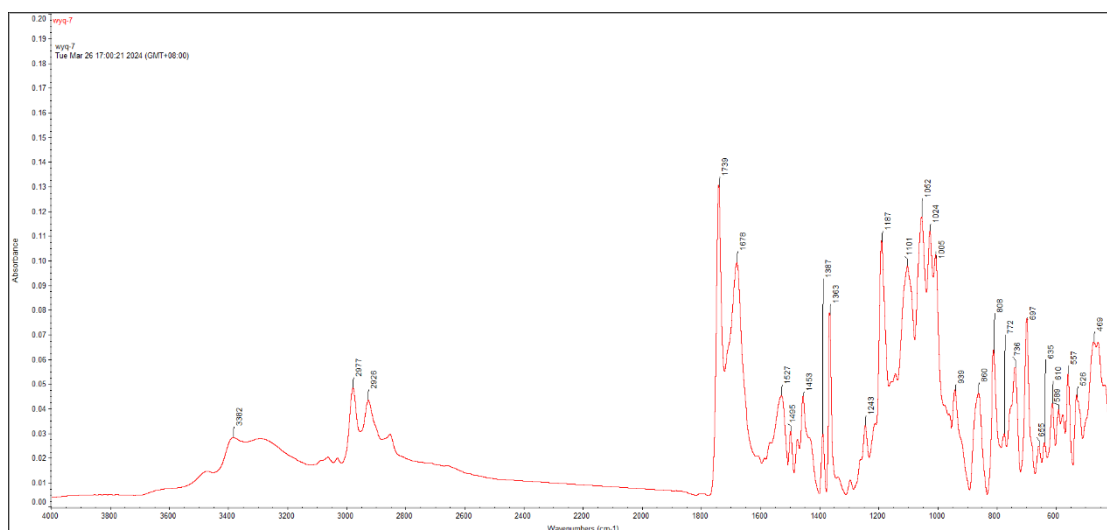


Figure S25 IR spectrum of 7

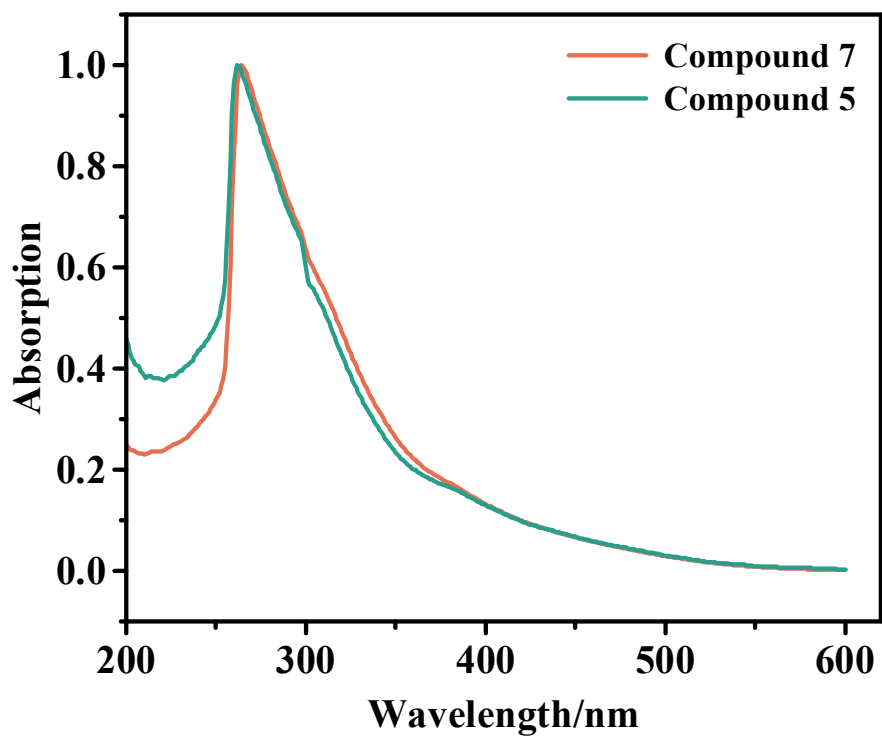


Figure S26 UV-Vis spectra of 5 and 7 in CH₂Cl₂