

Supporting information for

Syntheses and properties of core-substituted naphthalene bisimides with aryl ethynyl or cyano groups

Stéphanie Chopin, Frédéric Chaignon, Errol Blart, Fabrice Odobel*

Université de Nantes, Nantes Atlantique Universités, CNRS, Faculté des Sciences et des Techniques, Laboratoire de Synthèse Organique (LSO), UMR CNRS 6513, 2, rue de la Houssinière – BP 92208 – 44322 NANTES Cedex 3 ; E-mail address : Tel : (33)-2-51-12-54-29.

Contents

- Figure S1: ^1H NMR spectrum of **2** in CDCl_3 at 298 K. Page S1
- Figure S2: ^{13}C NMR spectrum of **2** in CDCl_3 at 298 K. Page S2
- Figure S3: FTIR spectrum of **2** in KBr pastille at 298 K. Page S3
- Figure S4: ^1H NMR spectrum of **3** in CDCl_3 at 298 K. Page S4
- Figure S5: ^{13}C NMR spectrum of **3** in CDCl_3 at 298 K. Page S5
- Figure S6: FTIR spectrum of **3** in KBr pastille at 298 K. Page S6
- Figure S7: ^1H NMR spectrum of **4** in CDCl_3 at 298 K. Page S7
- Figure S8: ^{13}C NMR spectrum of **4** in CDCl_3 at 298 K. Page S8
- Figure S9: FTIR spectrum of **4** in KBr pastille at 298 K. Page S9
- Figure S10: ^1H NMR spectrum of **5** in CDCl_3 at 298 K. Page S10
- Figure S11: ^{13}C NMR spectrum of **5** in CDCl_3 at 298 K. Page S11
- Figure S12: FTIR spectrum of **5** in KBr pastille at 298 K. Page S12
- Figure S13: ^1H NMR spectrum of **6** in CDCl_3 at 298 K. Page S13
- Figure S14: ^{13}C NMR spectrum of **6** in CDCl_3 at 298 K. Page S14
- Figure S15: FTIR spectrum of **6** in KBr pastille at 298 K. Page S15
- Figure S16: ^1H NMR spectrum of **7** in CDCl_3 at 298 K. Page S16
- Figure S17: ^{13}C NMR spectrum of **7** in CDCl_3 at 298 K. Page S17
- Figure S18: FTIR spectrum of **7** in KBr pastille at 298 K. Page S18
- Figure S19: Overlay of the electronic absorption (dashed line) and emission (straight line) spectra of **4** recorded in dichloromethane. Page S19
- Figure S20: Overlay of the electronic absorption (dashed line) and emission (straight line) spectra of **6** recorded in dichloromethane. Page S20
- Figure S21: Overlay of the electronic absorption spectrum of **3** in pure dichloromethane (thin straight line), in dichloromethane + HPF_6 (dashed line) and emission spectrum in dichloromethane + HPF_6 (bold straight line). Page S21

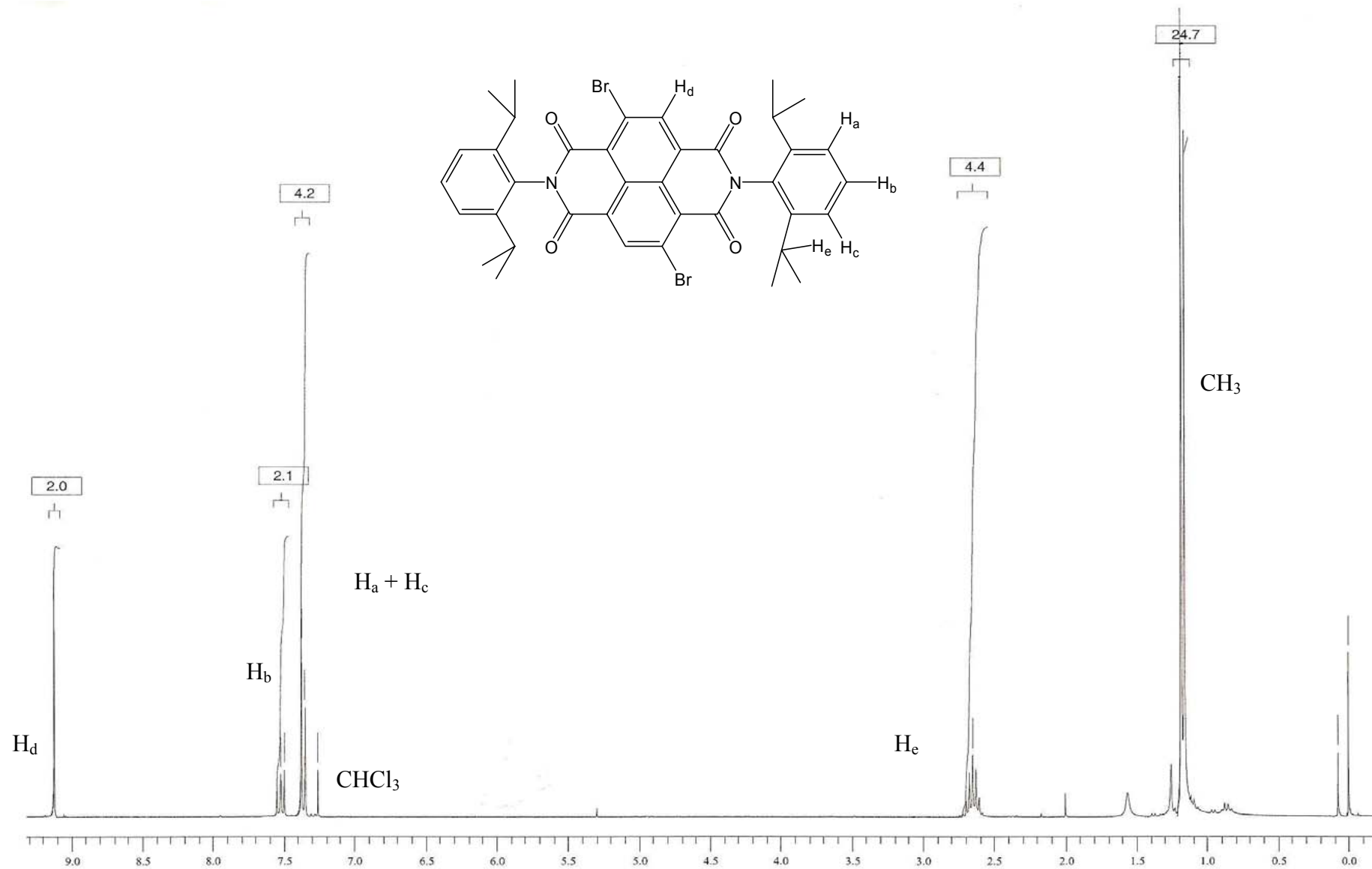


Figure S1: ^1H NMR spectrum of **2** in CDCl_3 at 298 K.

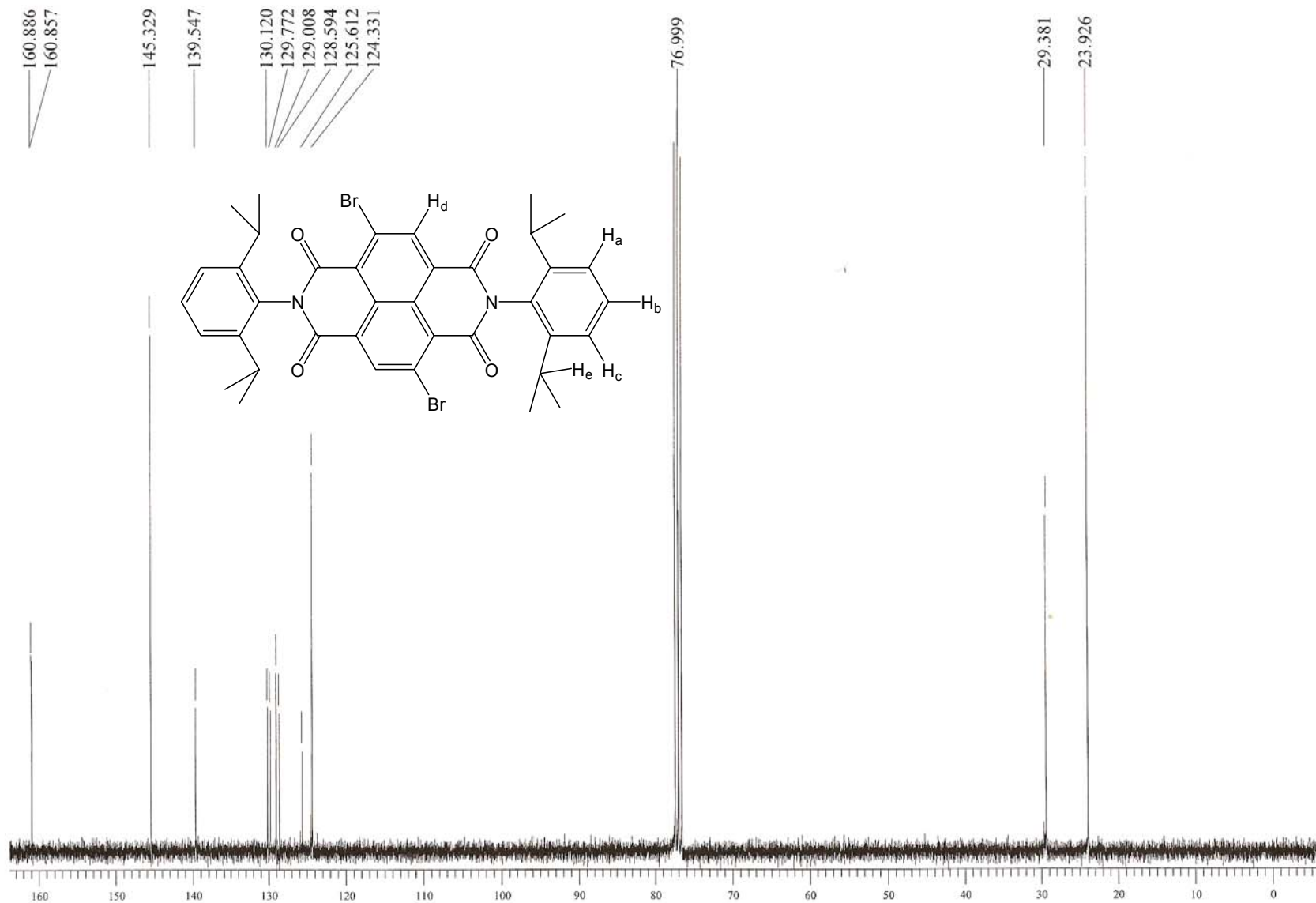


Figure S2 : ^{13}C NMR spectrum of **2** in CDCl_3 at 298 K.

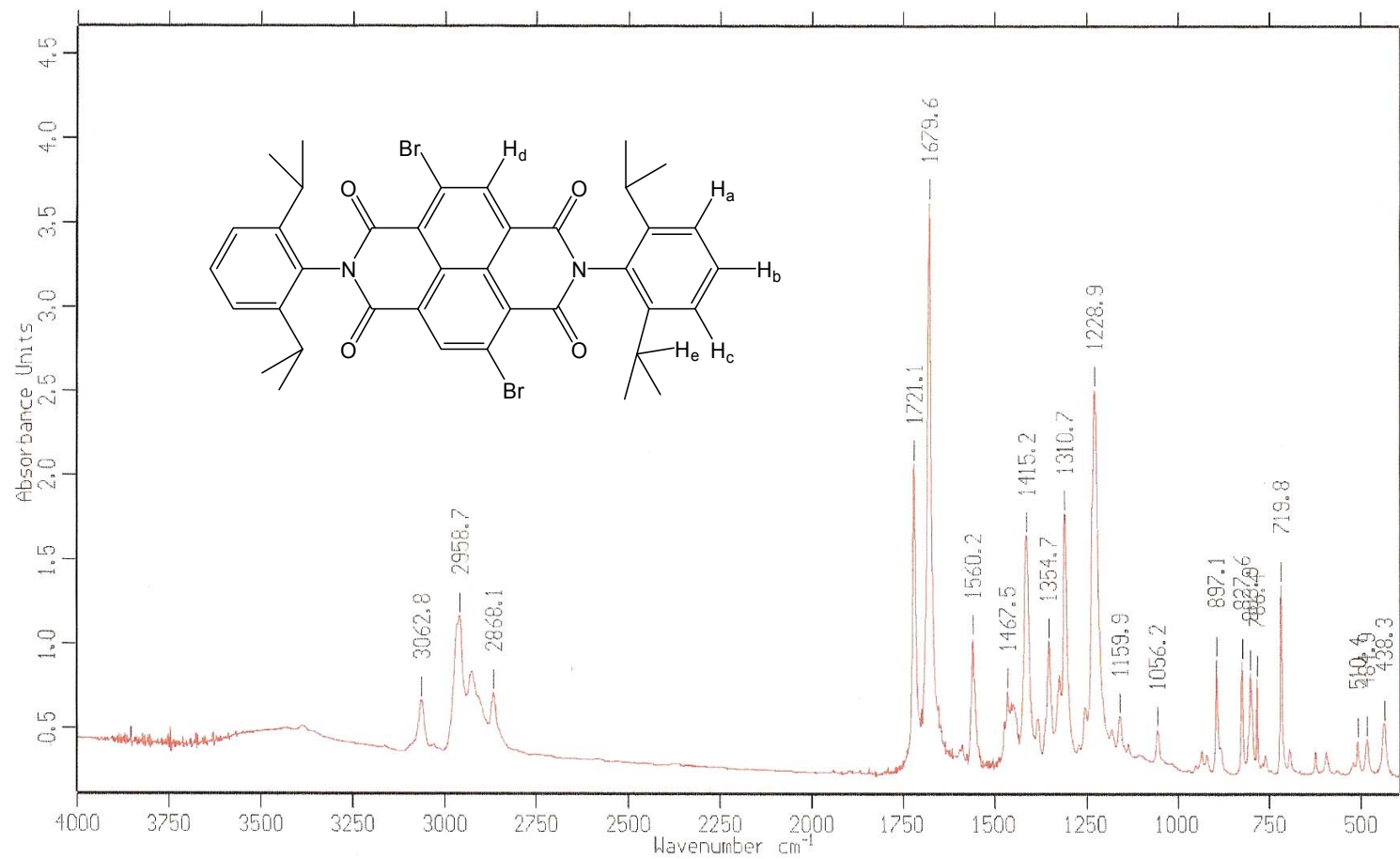


Figure S3 : FTIR spectrum of **2** in KBr pastille at 298 K.

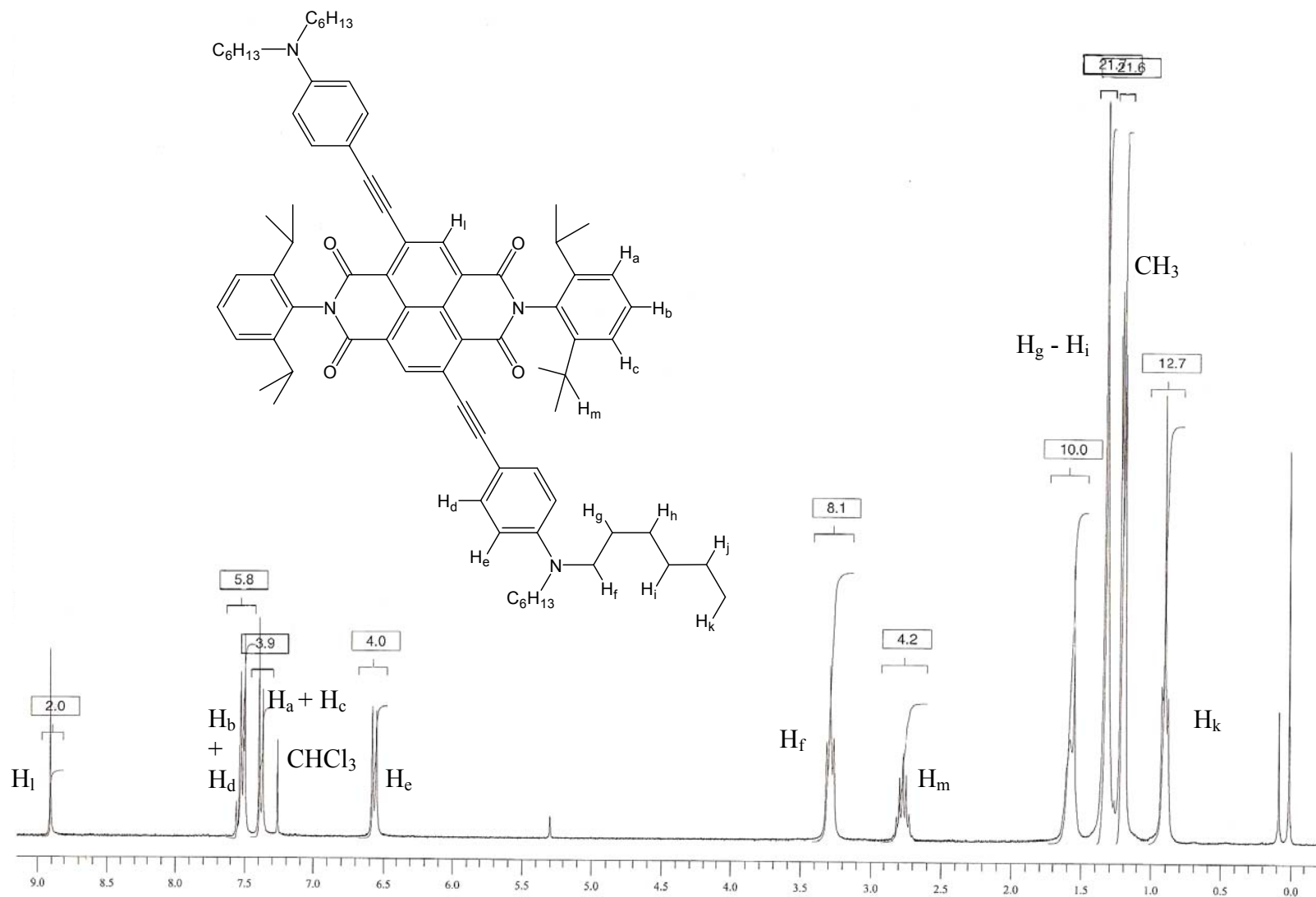


Figure S4: ^1H NMR spectrum of **3** in CDCl_3 at 298 K.

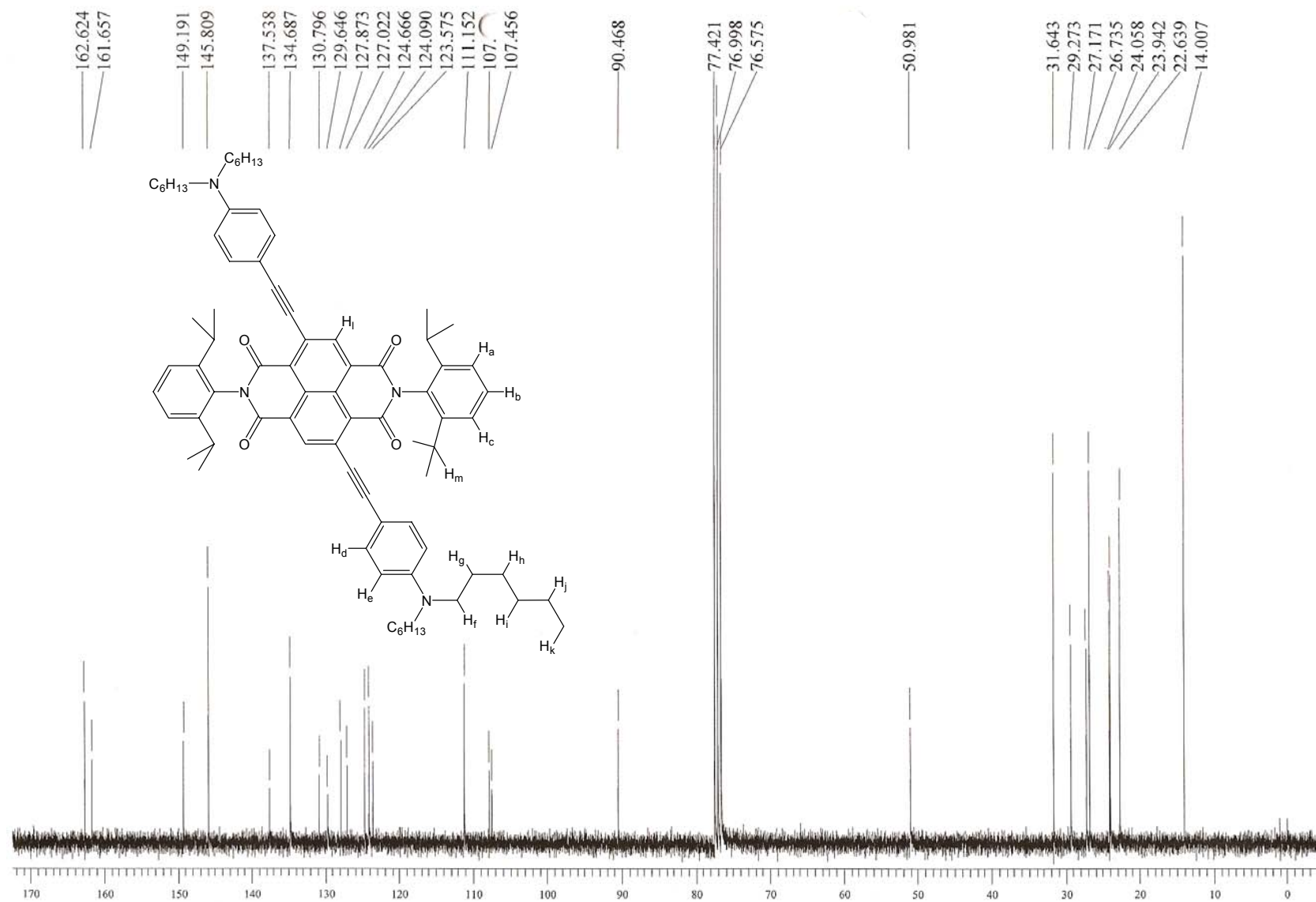


Figure S5: ¹³C NMR spectrum of **3** in CDCl₃ at 298 K.

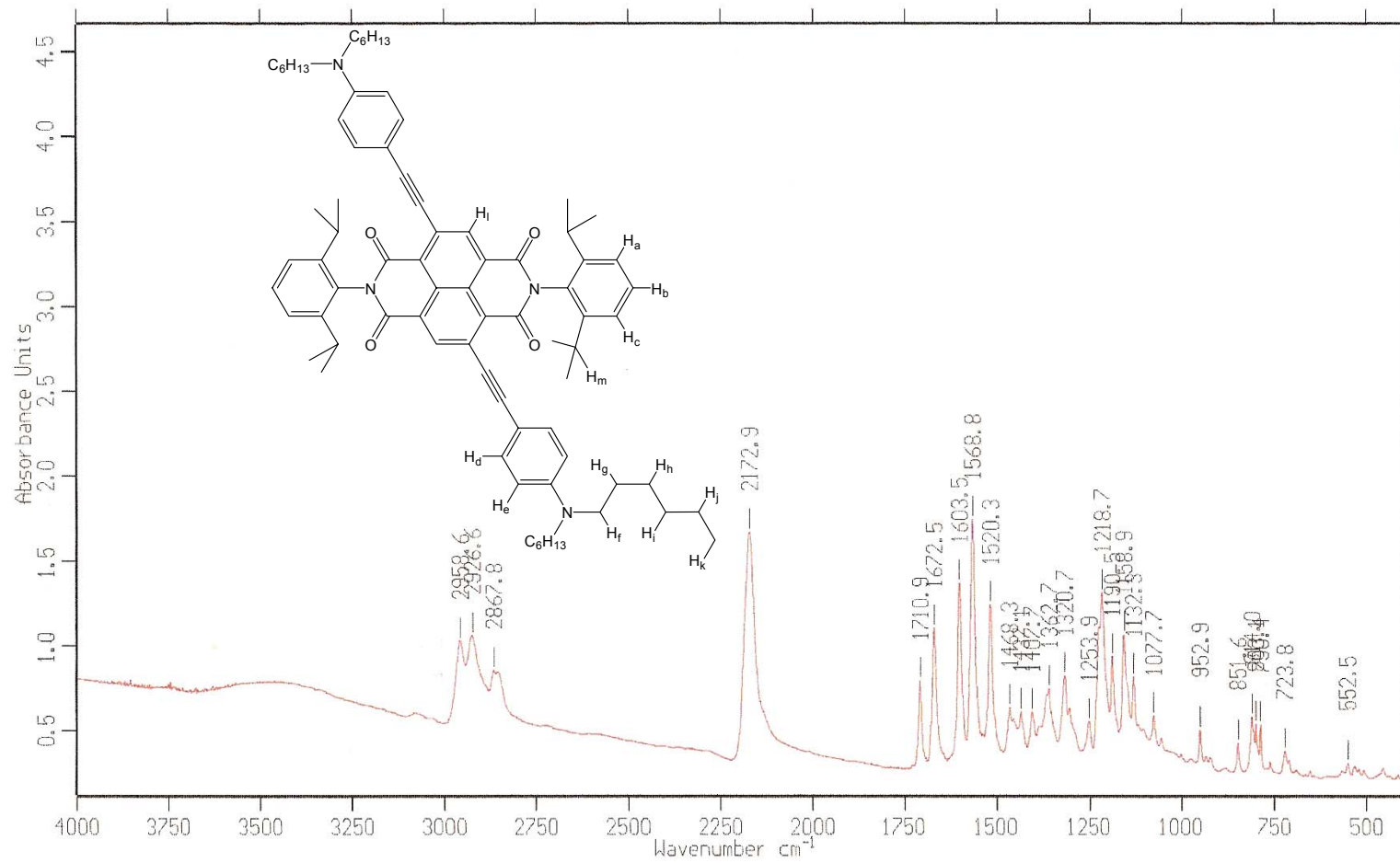


Figure S6: FTIR spectrum of **3** in KBr pastille at 298 K.

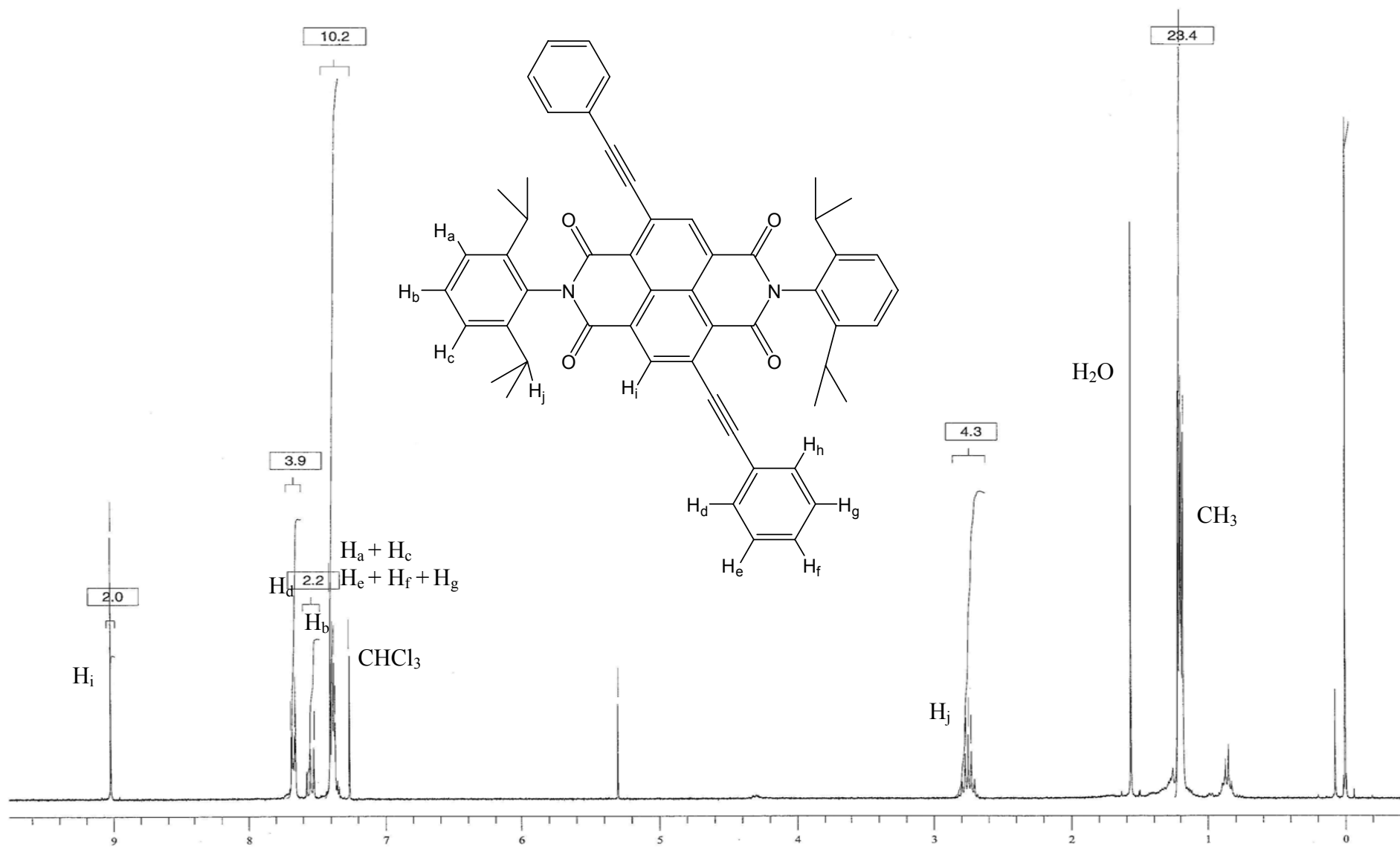


Figure S7: ^1H NMR spectrum of **4** in CDCl_3 at 298 K.

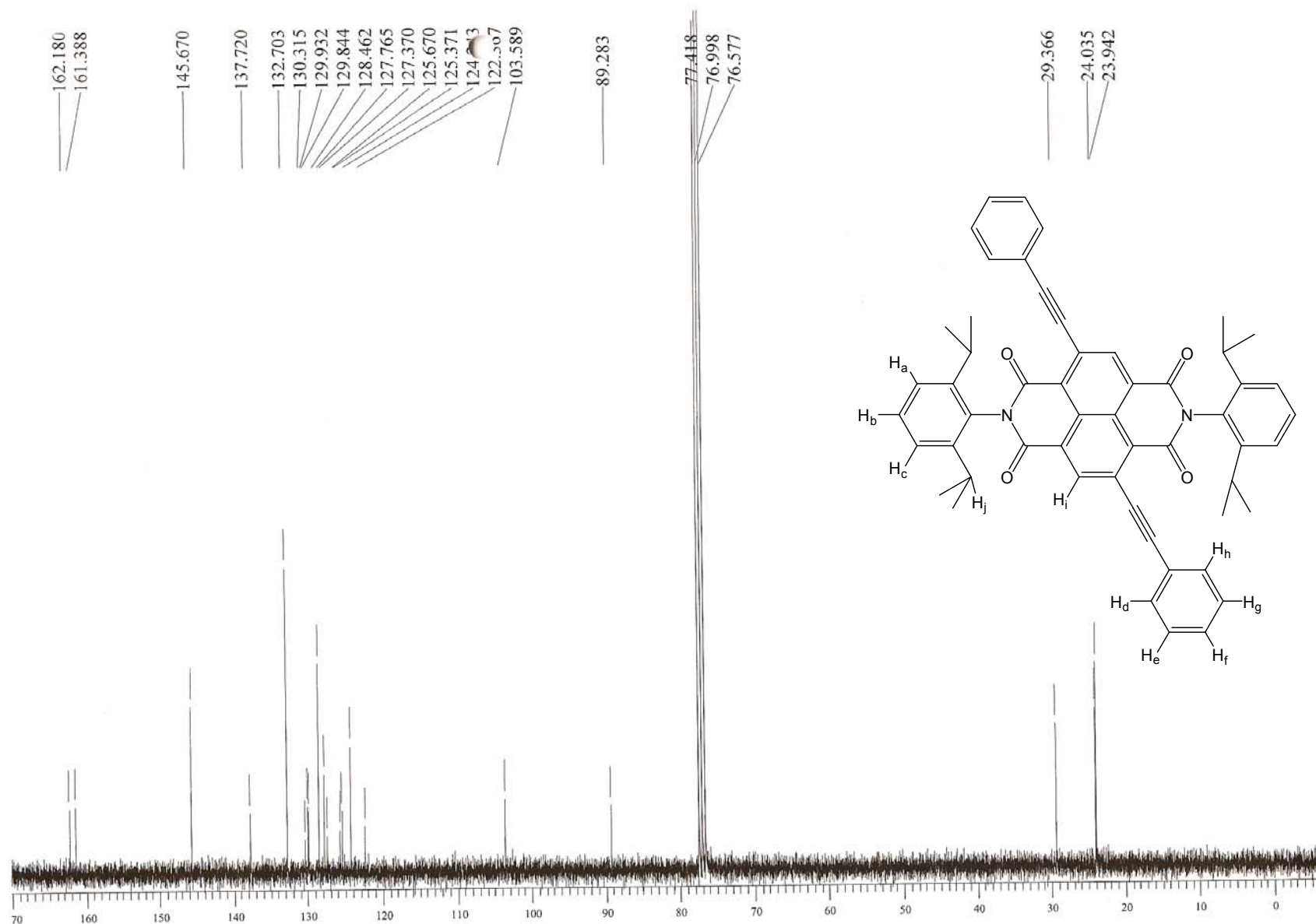


Figure S8 : ^{13}C NMR spectrum of **4** in CDCl_3 at 298 K.

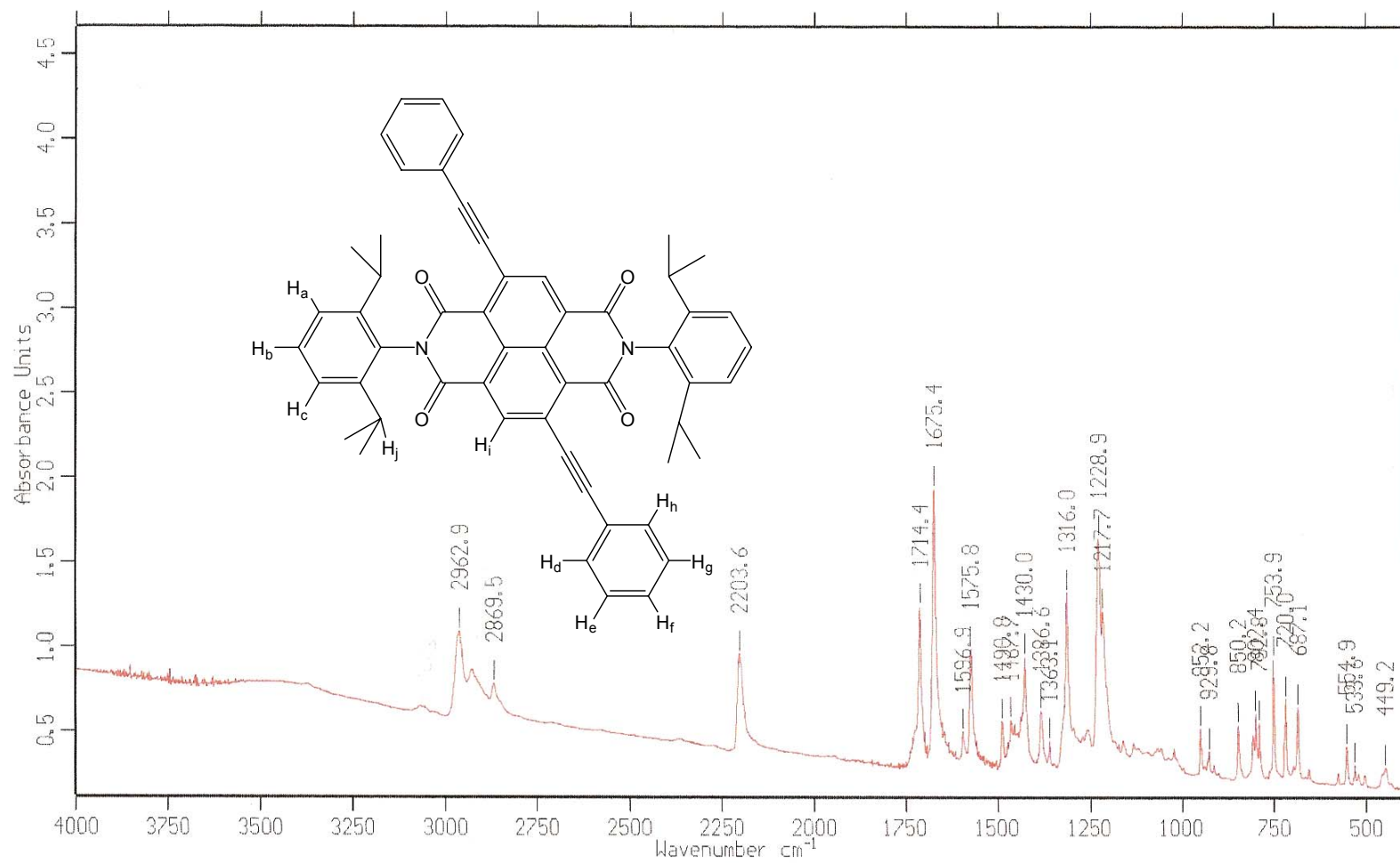


Figure S9 : FTIR spectrum of 4 in KBr pastille at 298 K.

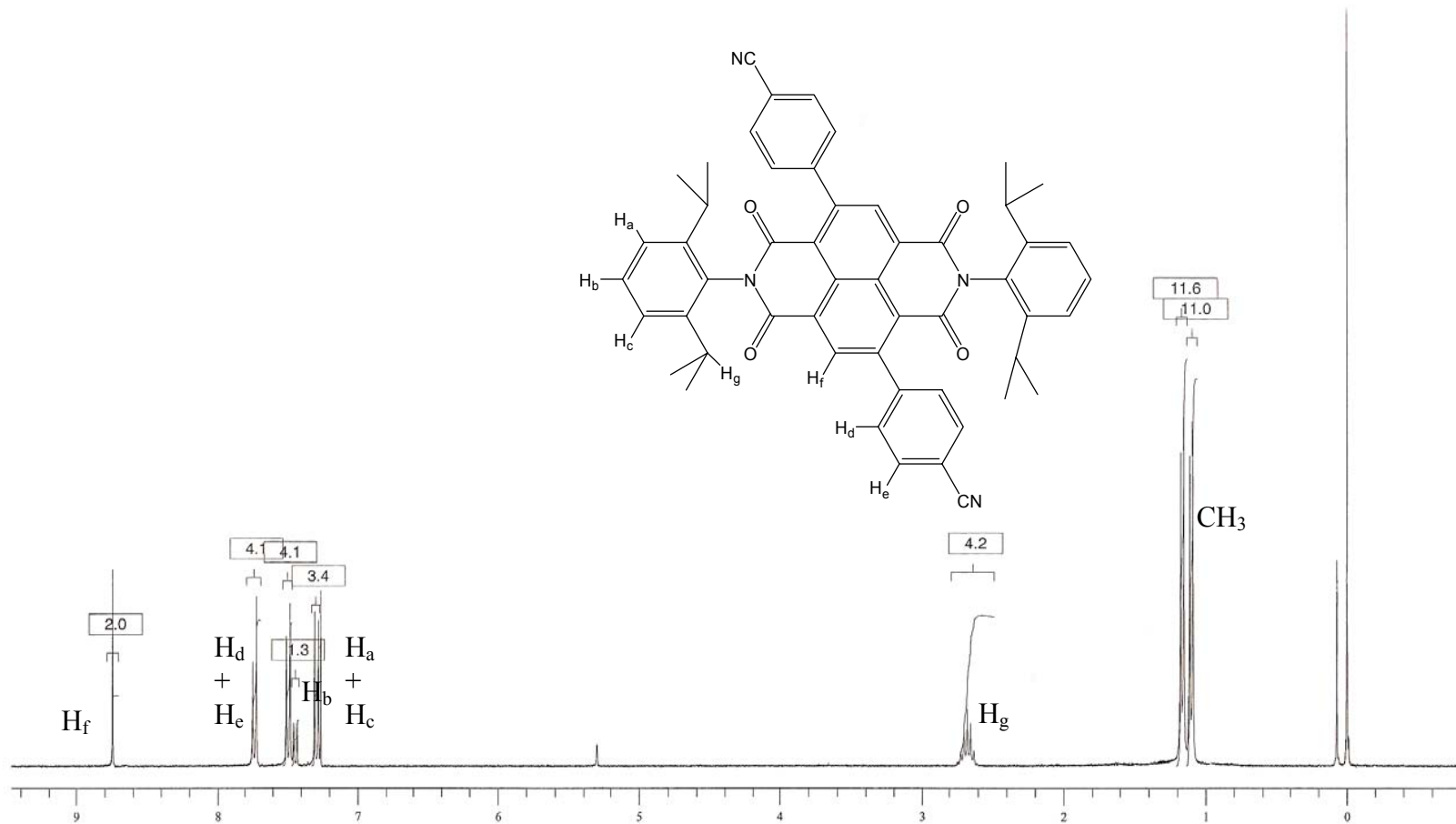


Figure S10: ^1H NMR spectrum of **5** in CDCl_3 at 298 K.

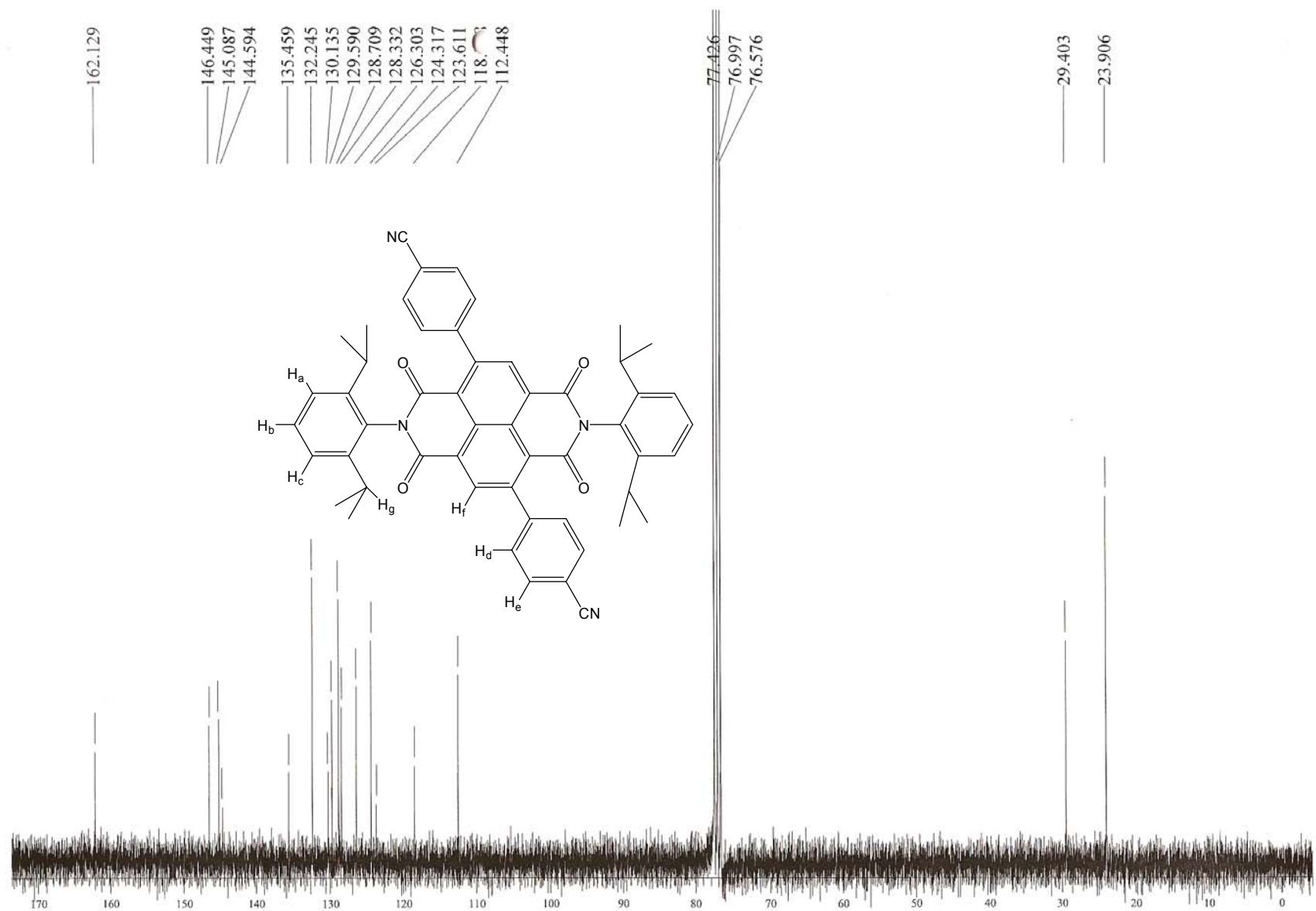


Figure S11: ^{13}C NMR spectrum of **5** in CDCl_3 at 298 K.

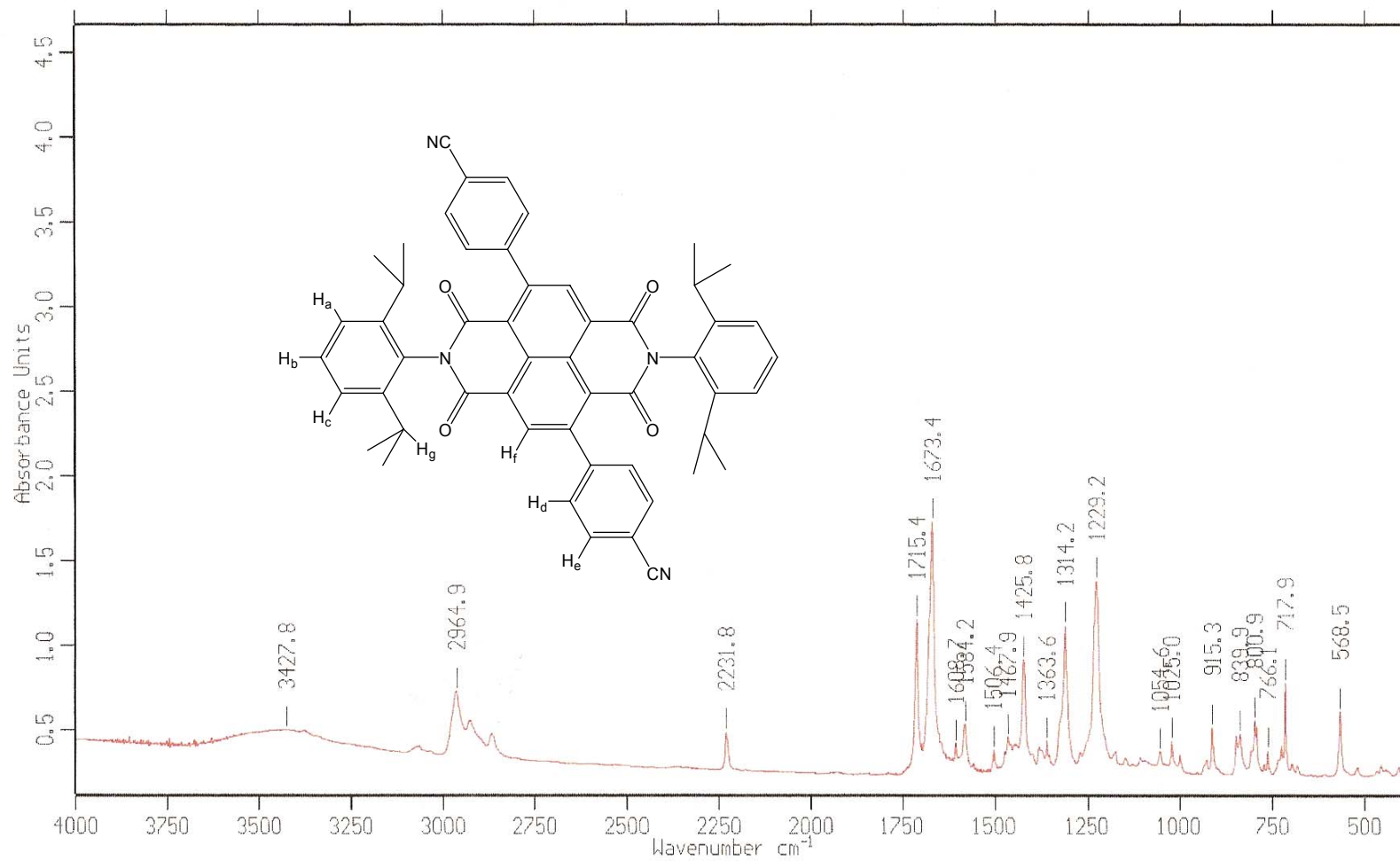


Figure S12: FTIR spectrum of **5** in KBr pastille at 298 K.

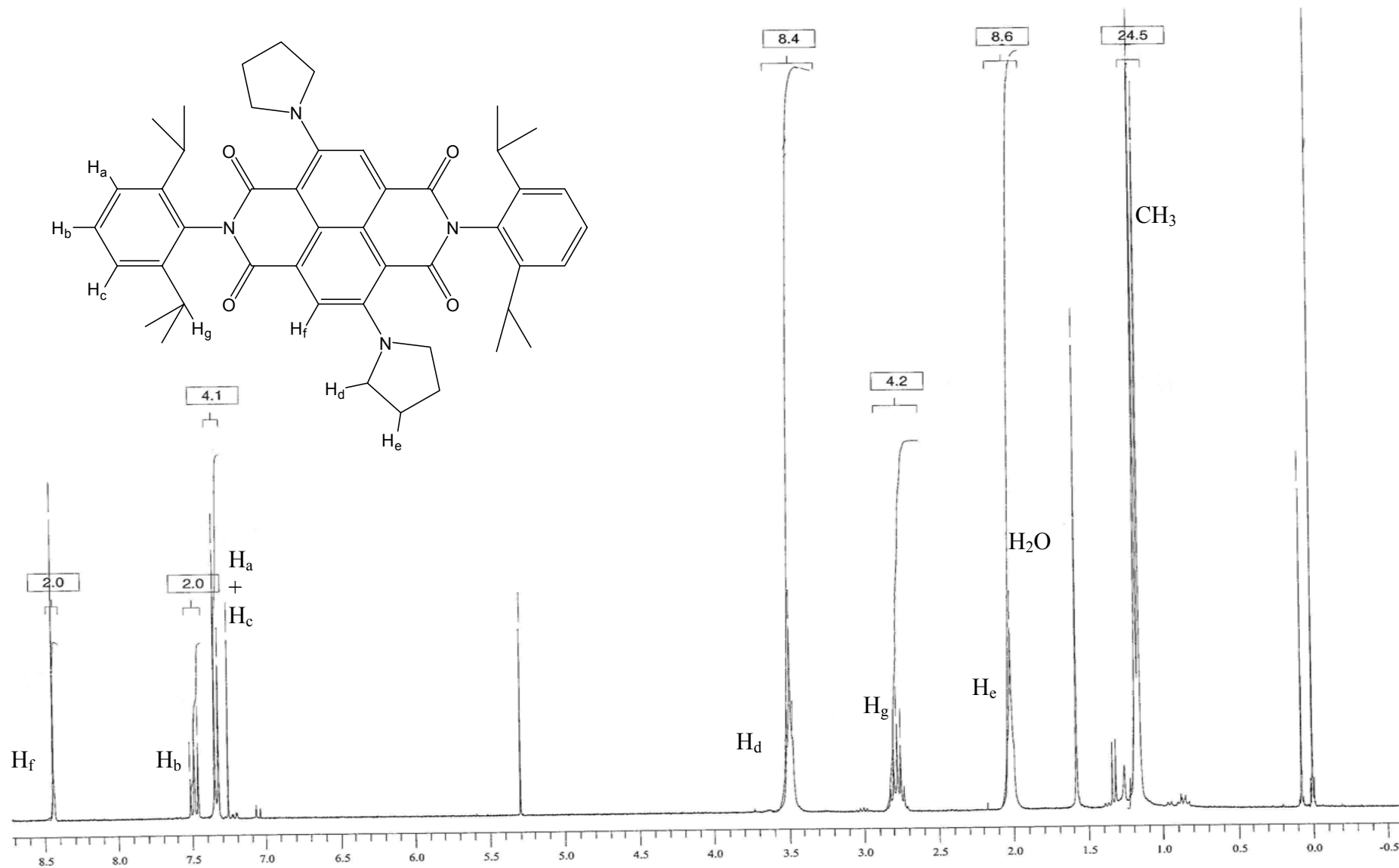


Figure S13: ^1H NMR spectrum of **6** in CDCl_3 at 298 K.

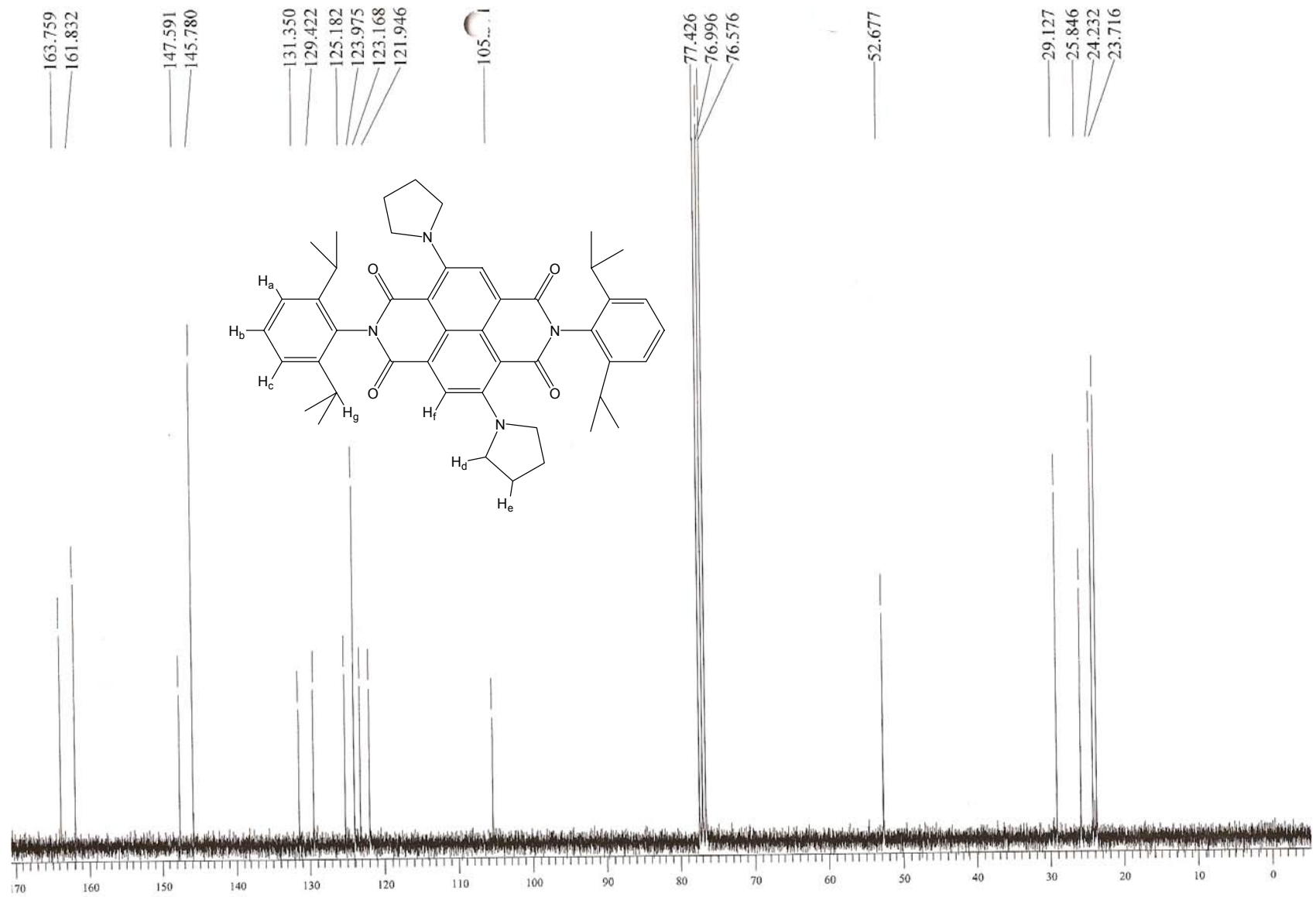


Figure S14: ^{13}C NMR spectrum of **6** in CDCl_3 at 298 K.

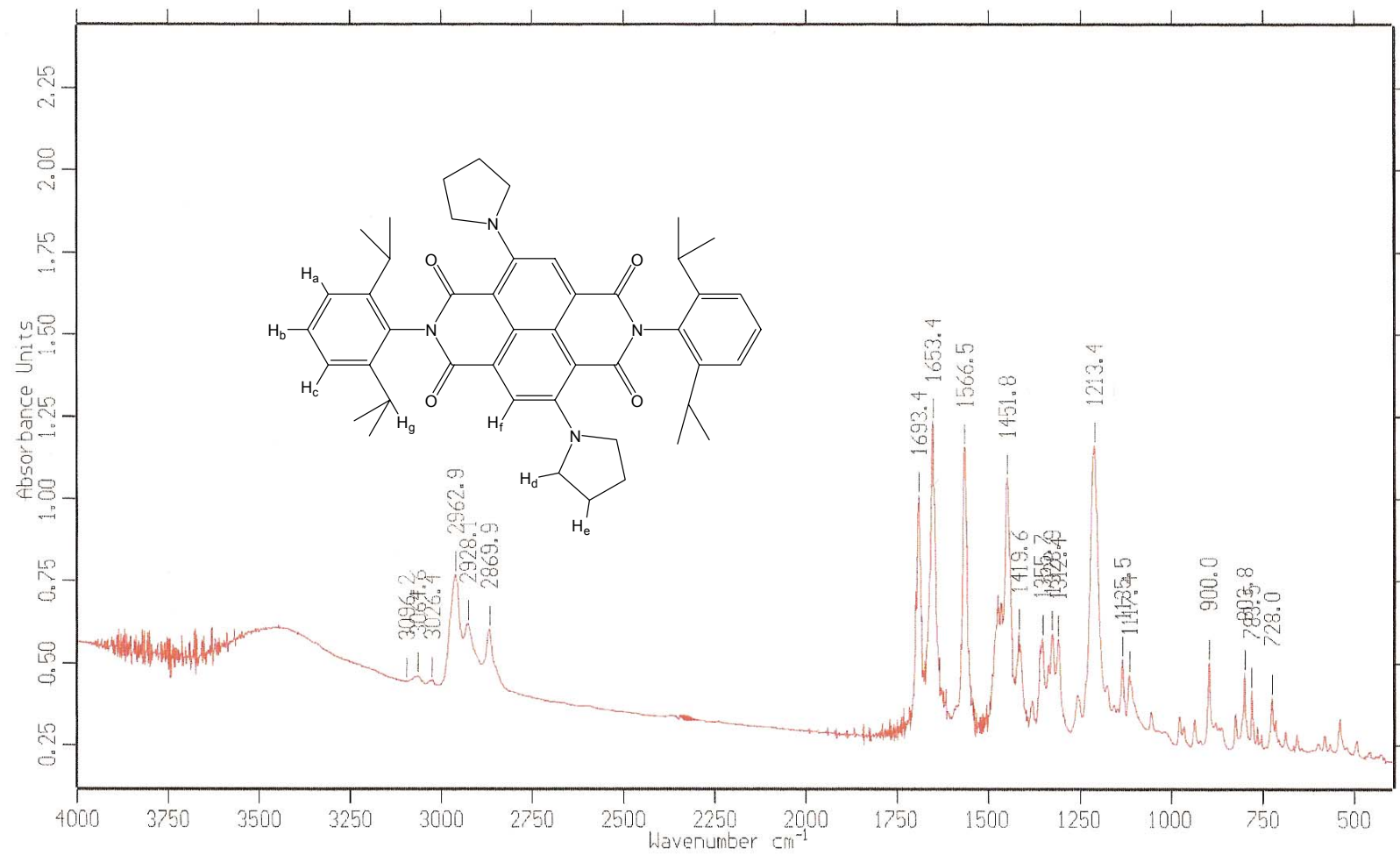


Figure S15: FTIR spectrum of **6** in KBr pastille at 298 K.

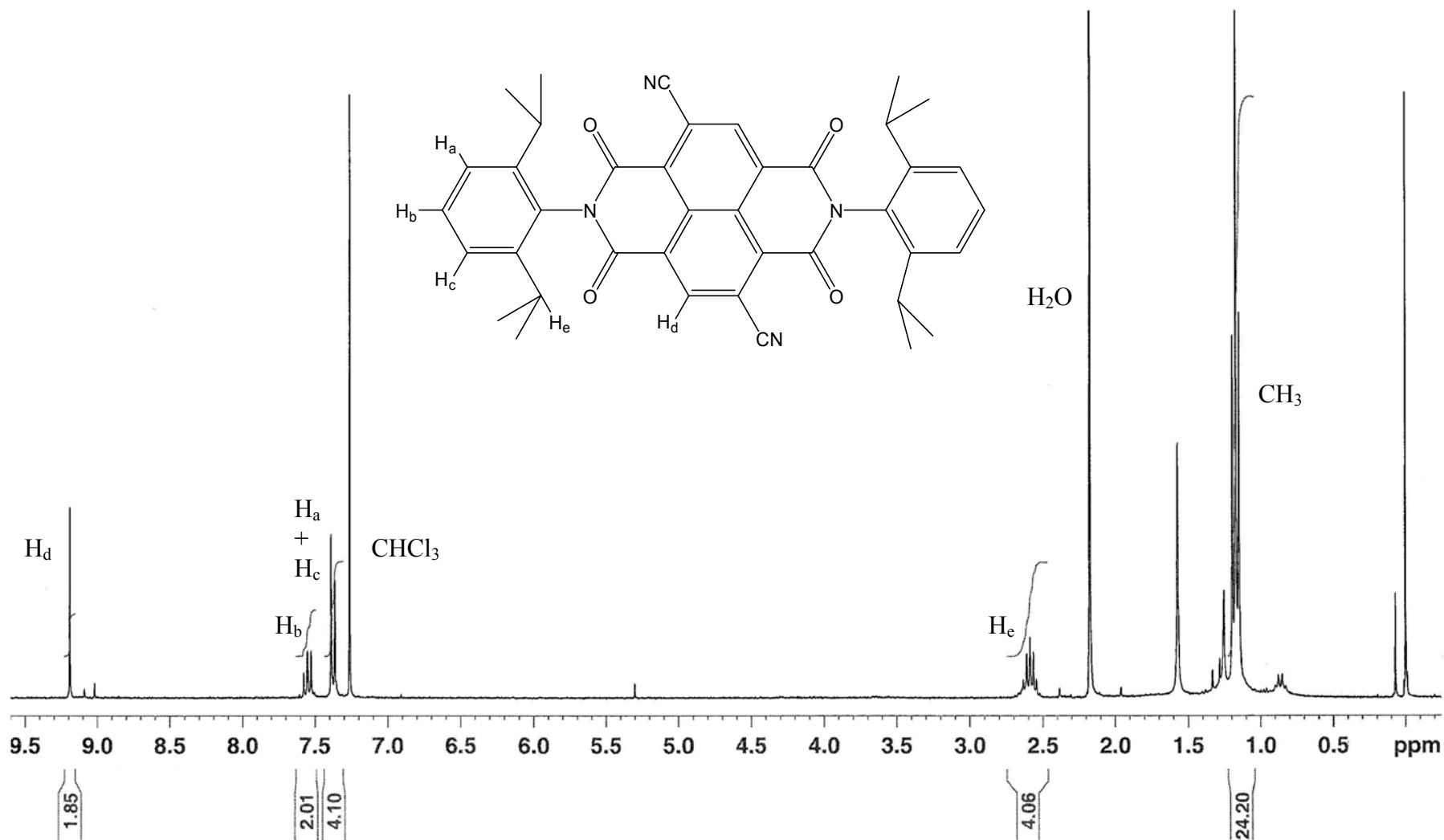


Figure S16: ^1H NMR spectrum of **7** in CDCl_3 at 298 K.

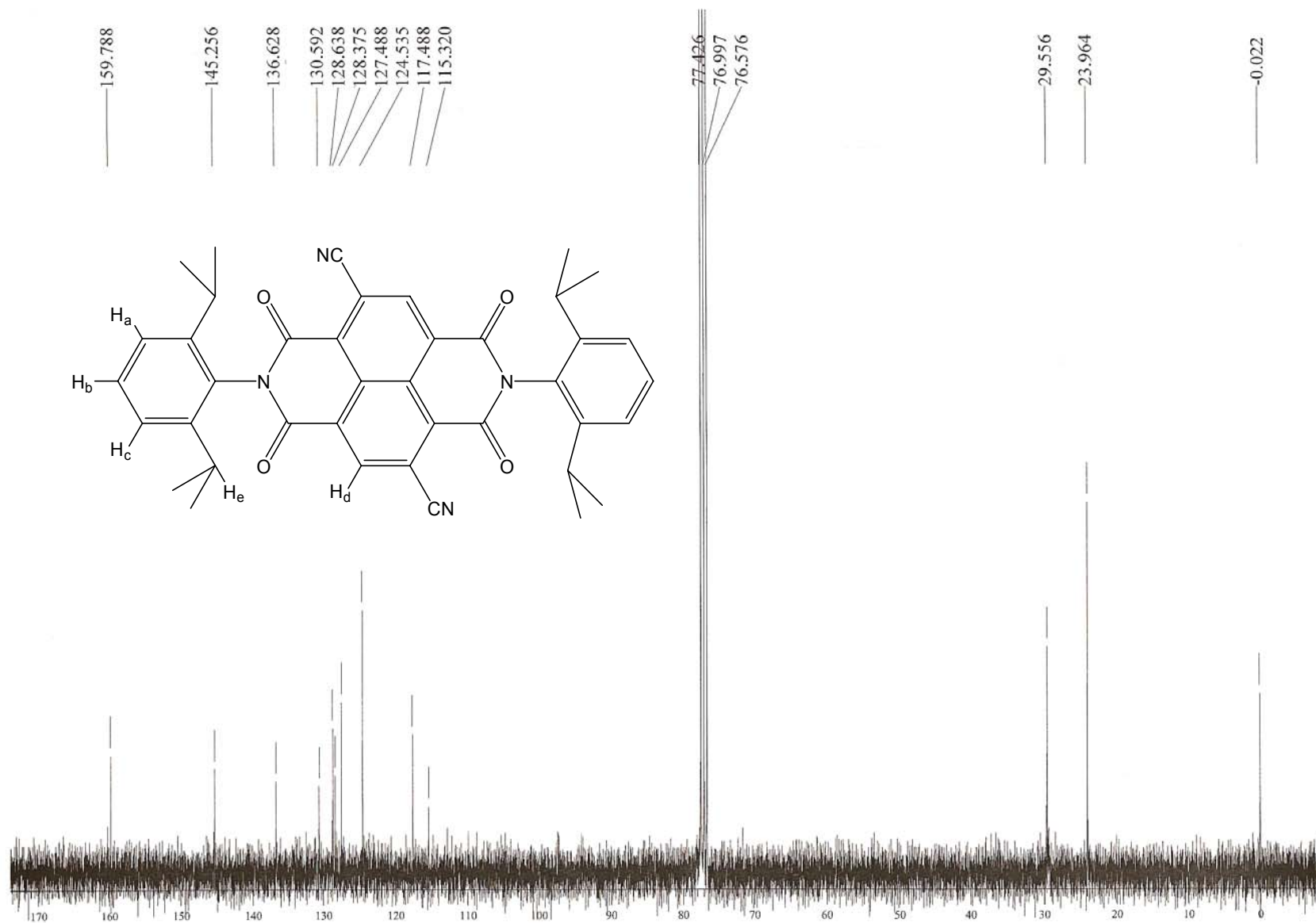


Figure S17: ^{13}C NMR spectrum of **7** in CDCl_3 at 298 K.

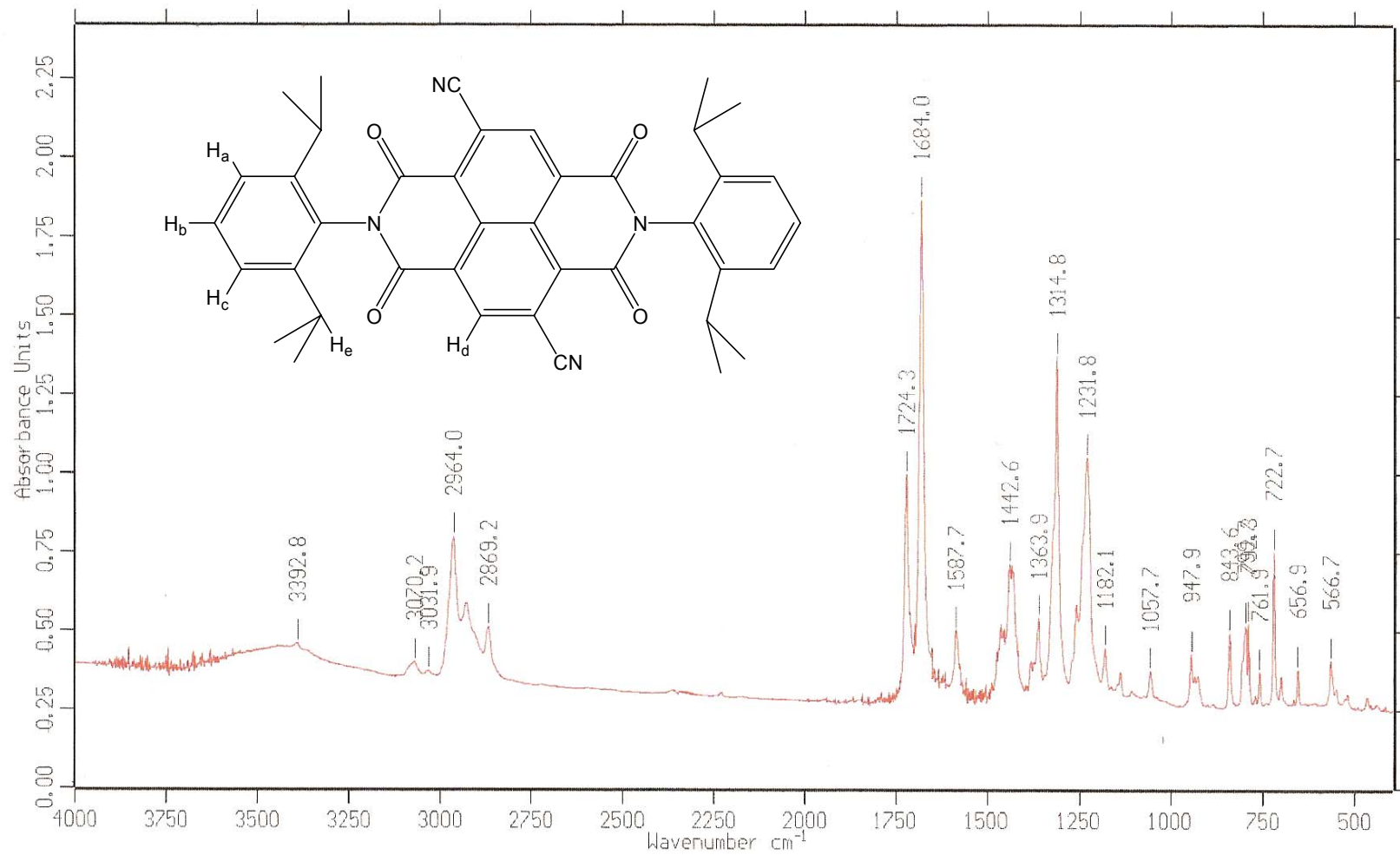


Figure S18: FTIR spectrum of 7 in KBr pastille at 298 K.

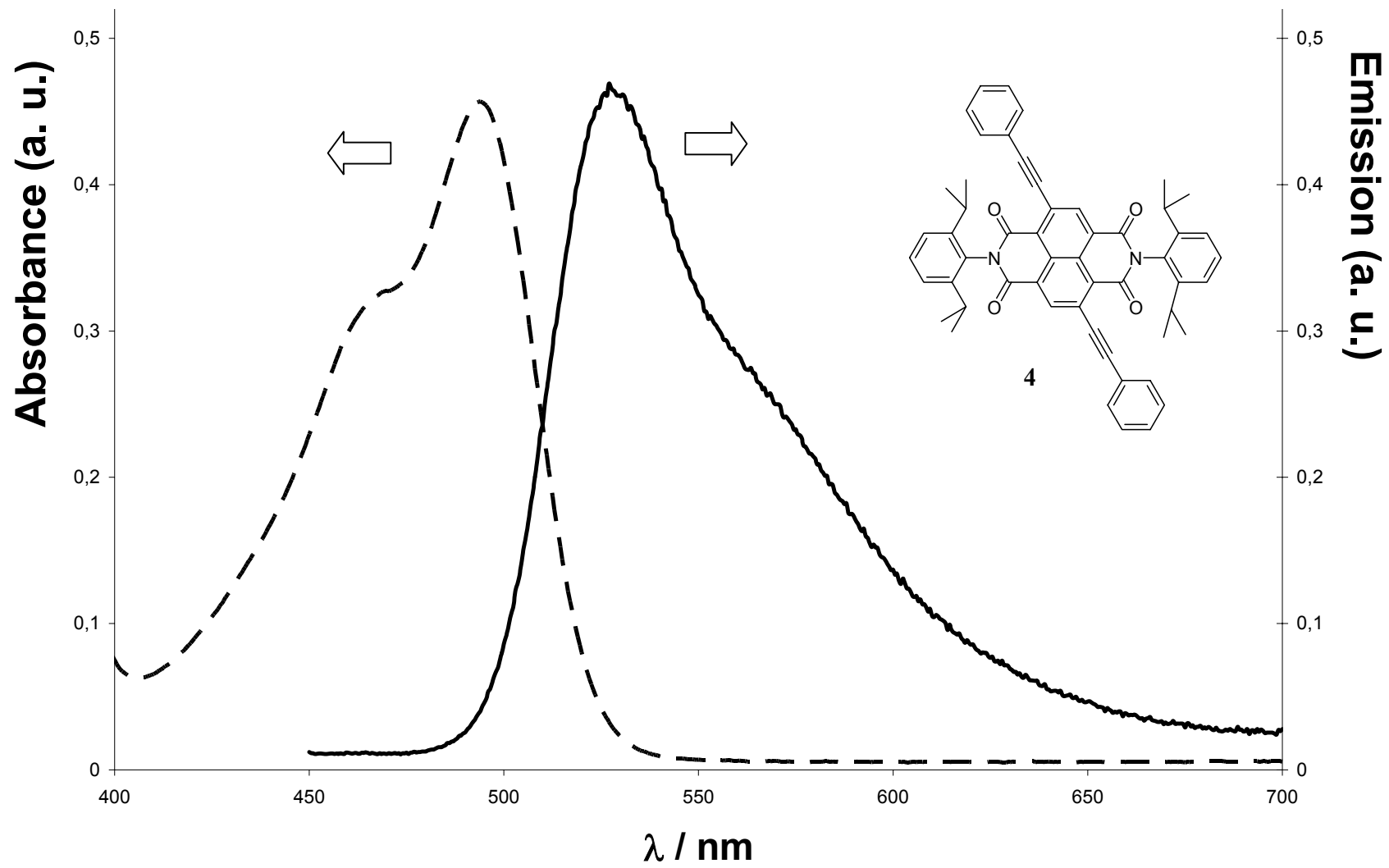


Figure S19: Overlay of the electronic absorption (dashed line) and emission (straight line) spectra of **4** recorded in dichloromethane.

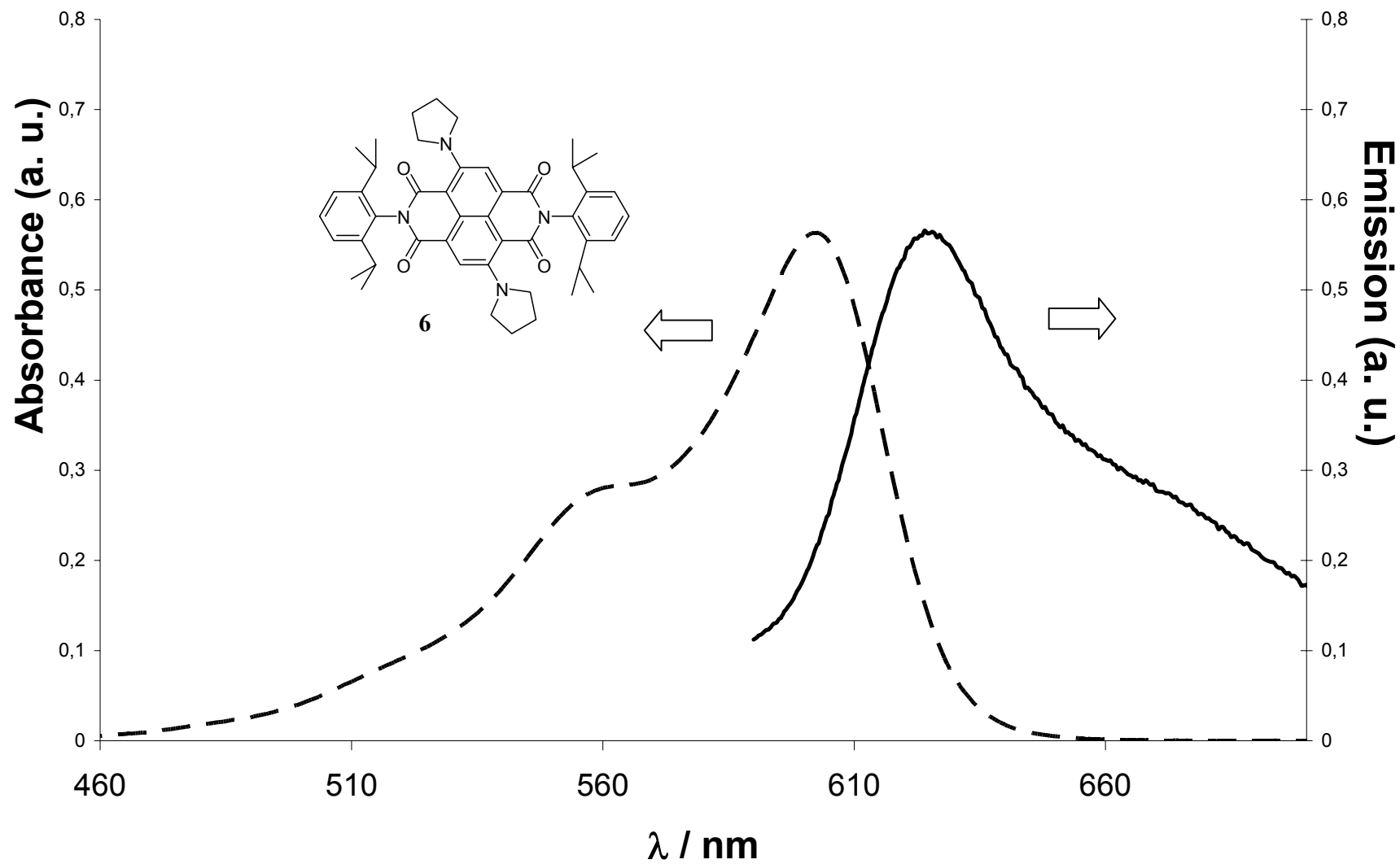


Figure S20: Overlay of the electronic absorption (dashed line) and emission (straight line) spectra of **6** recorded in dichloromethane.

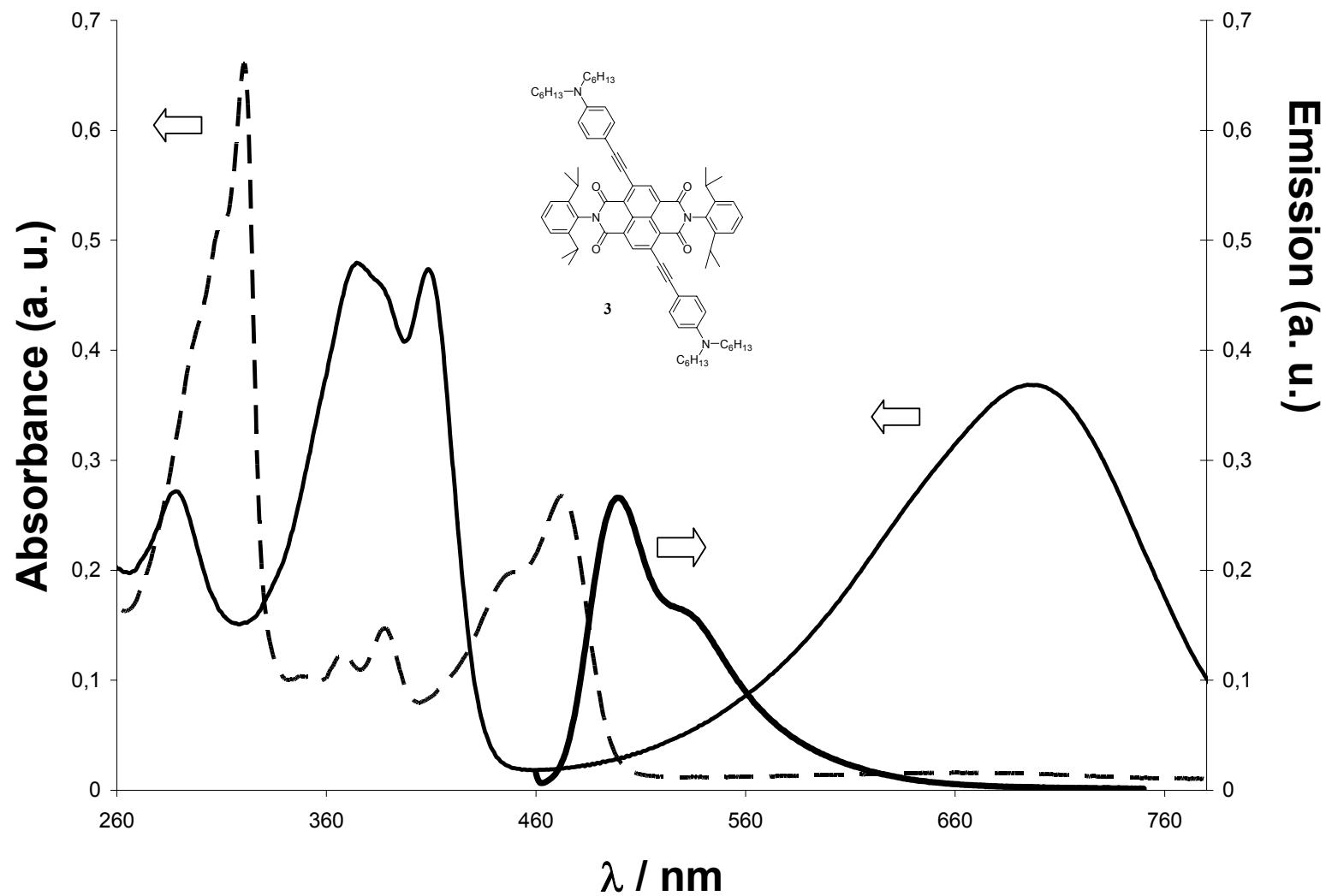


Figure S21: Overlay of the electronic absorption spectrum of **3** in pure dichloromethane (thin straight line), in dichloromethane + HPF₆ (dashed line) and emission spectrum in dichloromethane + HPF₆ (bold straight line).