

Supplementary data

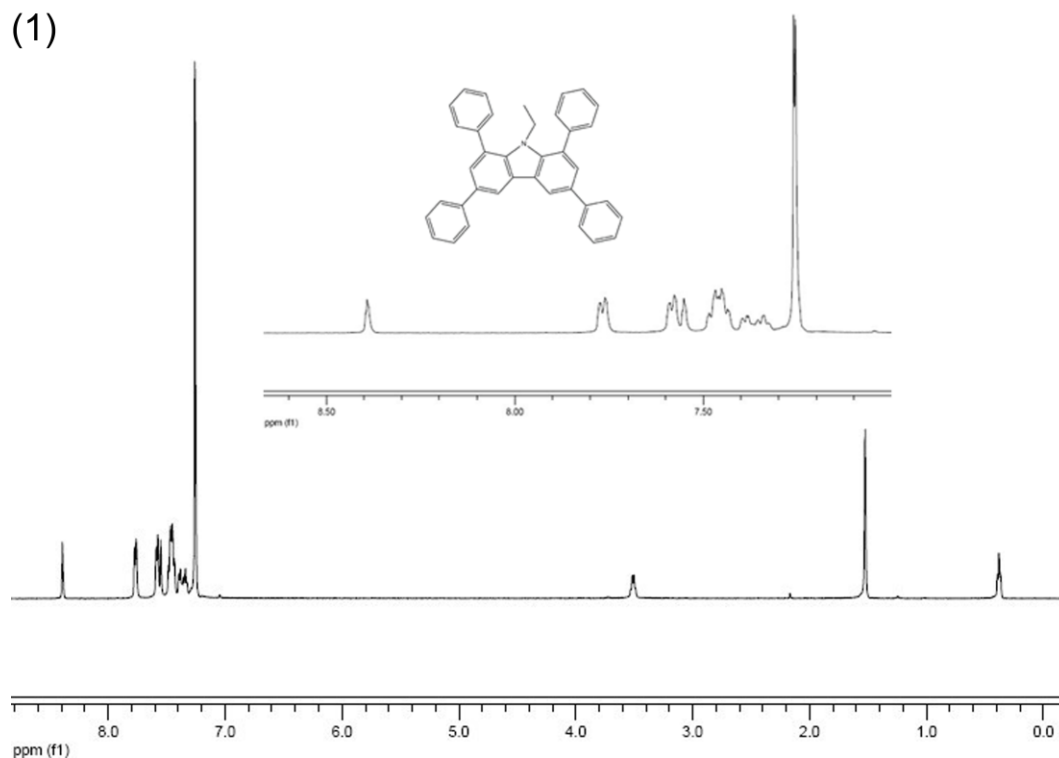
Synthesis, Characterization and Application of Starburst

9-Alkyl-1,3,6,8-tetraaryl-carbazole derivatives for Blue-violet to UV

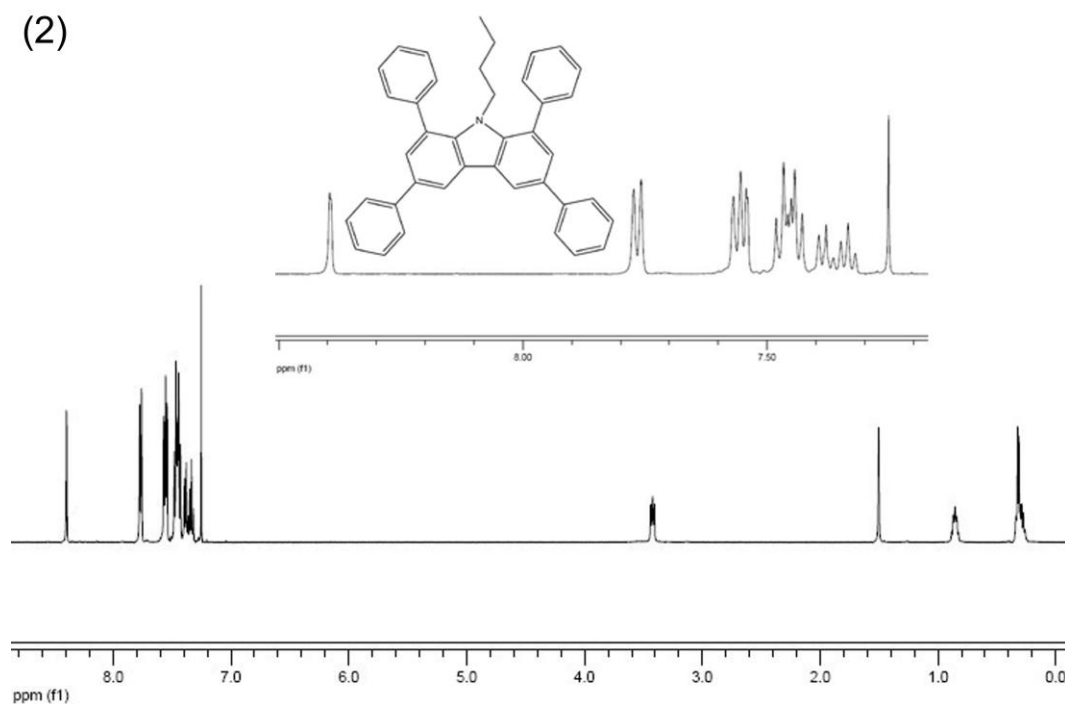
OLEDs

Fangfang Niu, Hanben Niu,* Yawei Liu, Jiarong Lian and Pengju Zeng*

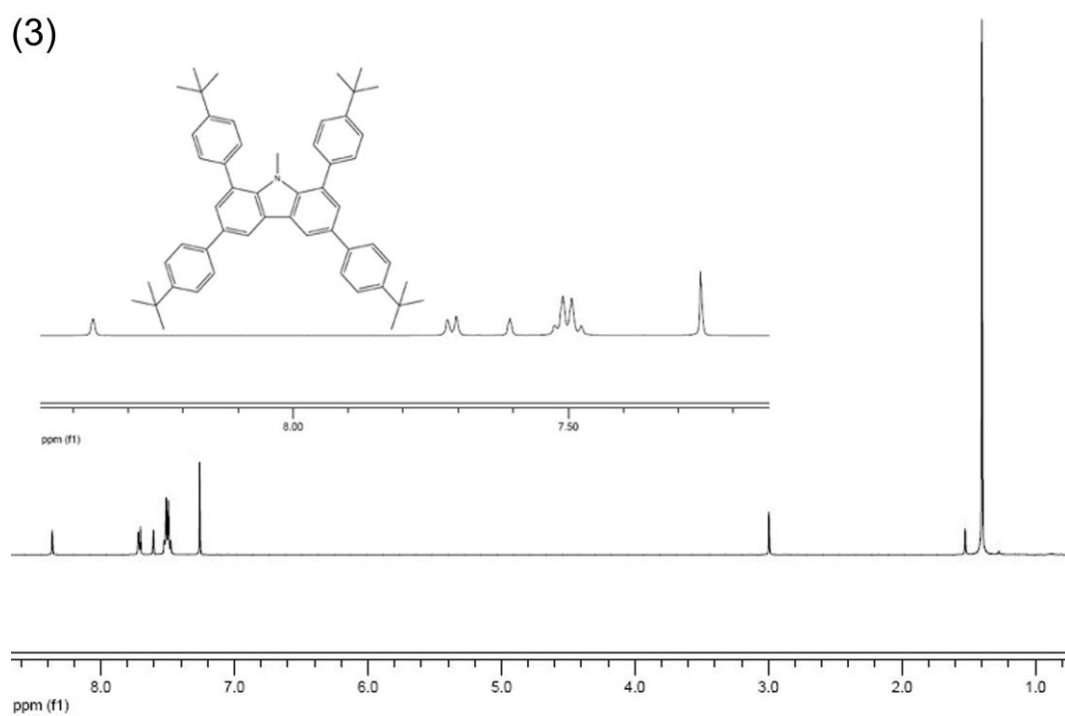
*Key Laboratory of Optoelectronics Devices and Systems of Ministry of Education,
College of Optoelectronics Engineering, Shenzhen University,
Shenzhen, 518060, P. R. China. E-mail: zengpj@szu.edu.cn; HBNiu@szu.edu.cn*

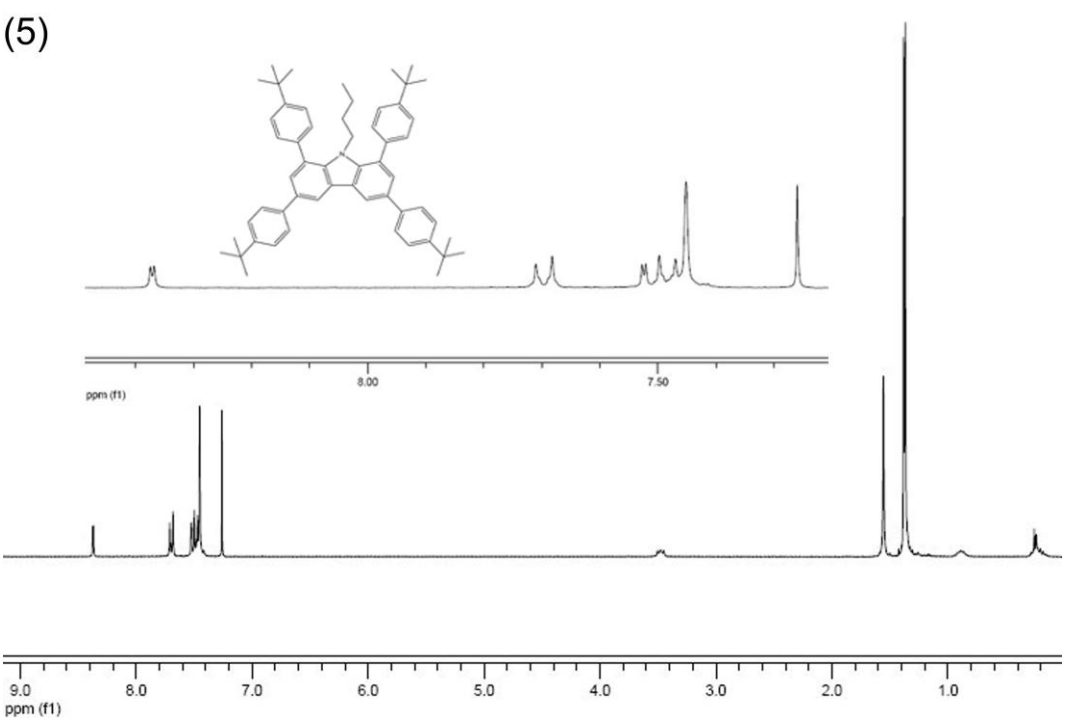
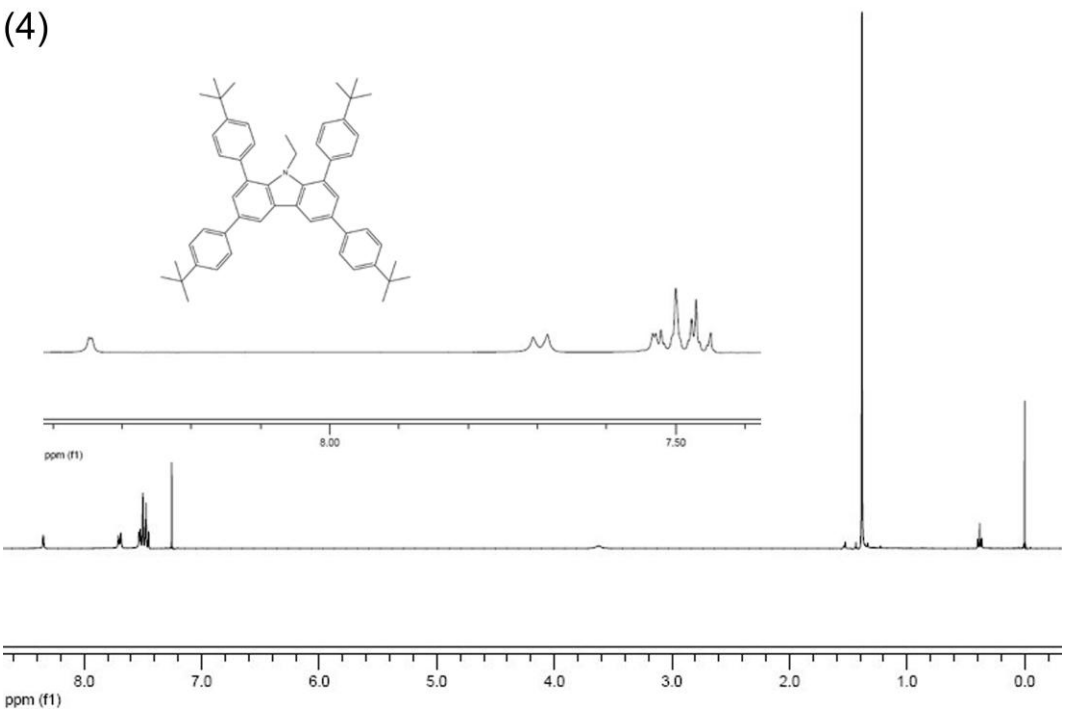


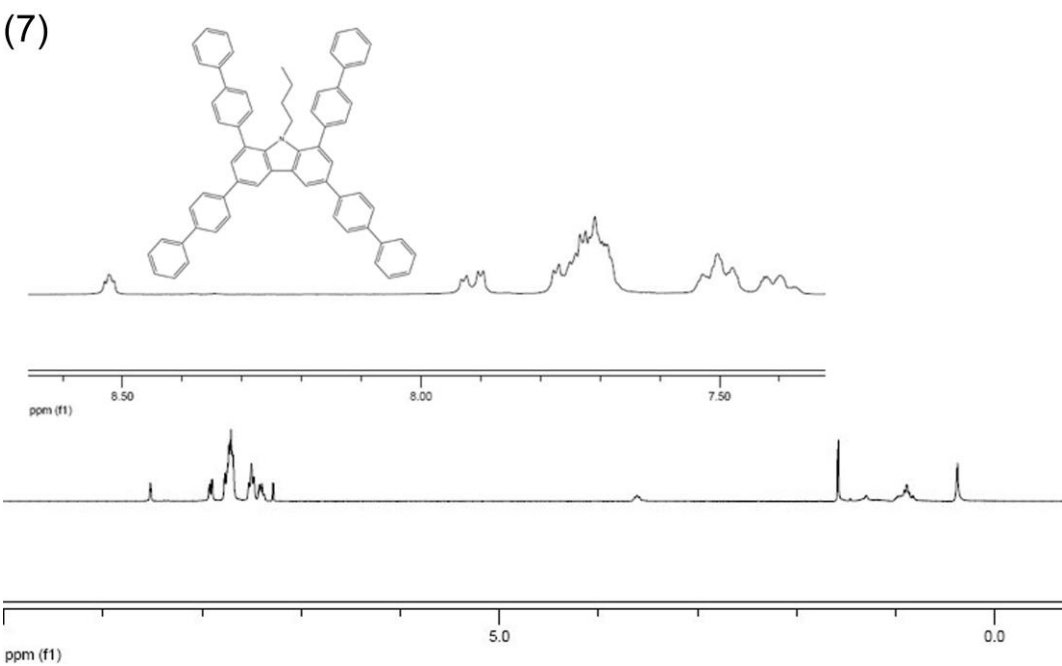
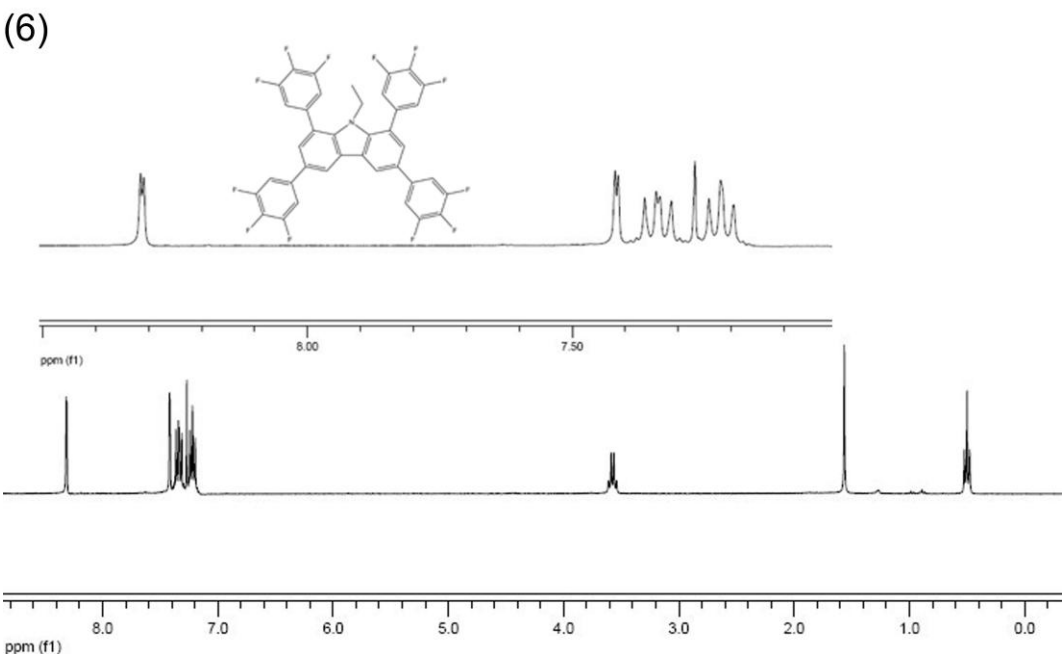
(2)



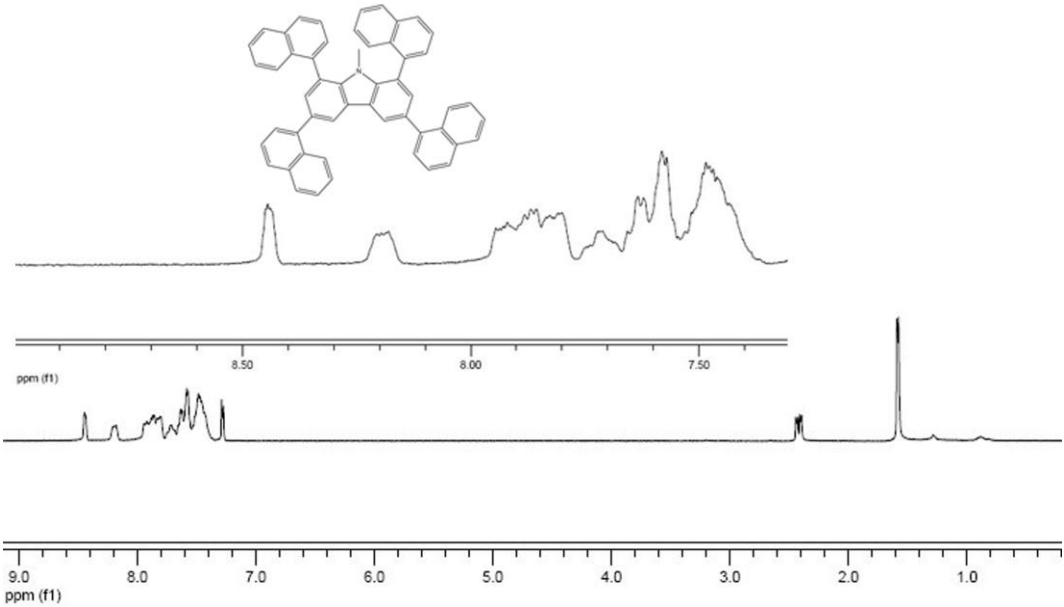
(3)



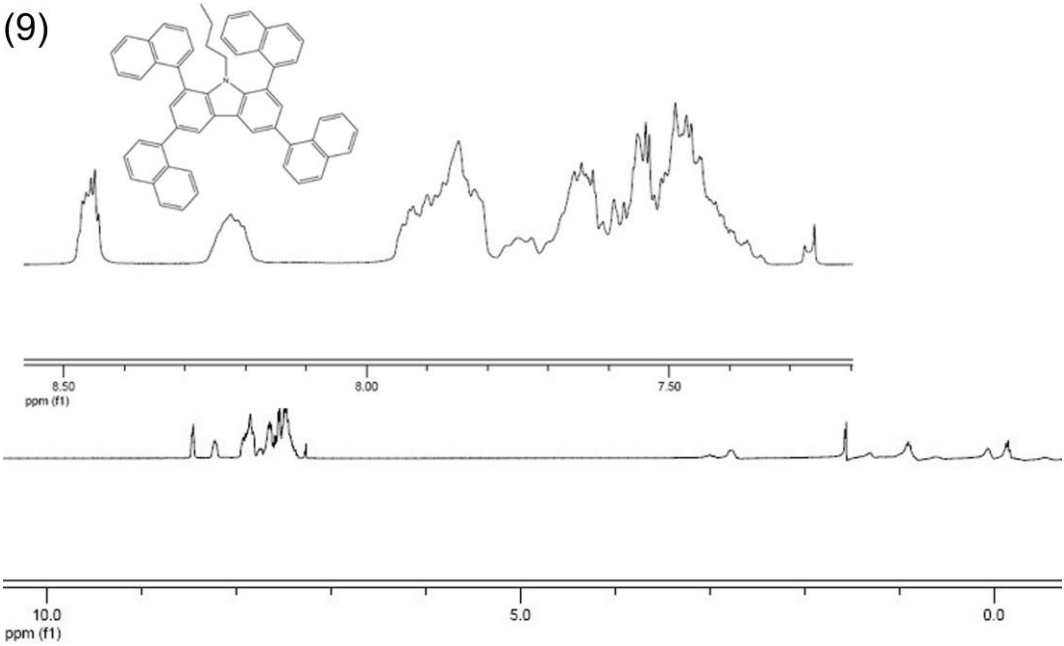




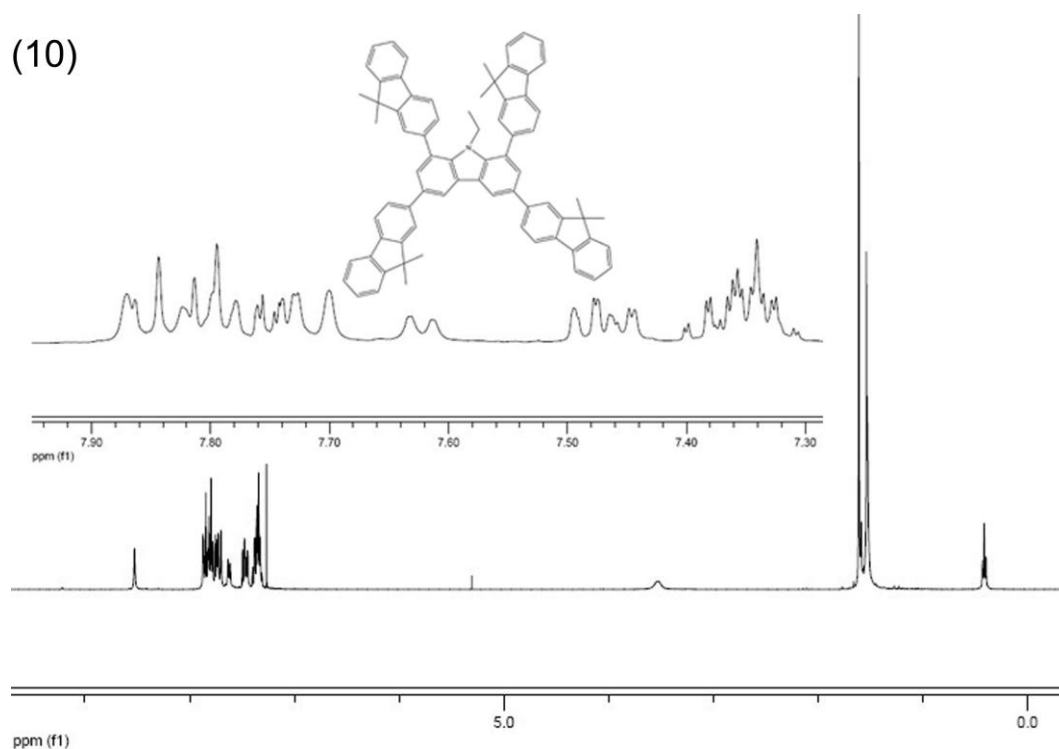
(8)



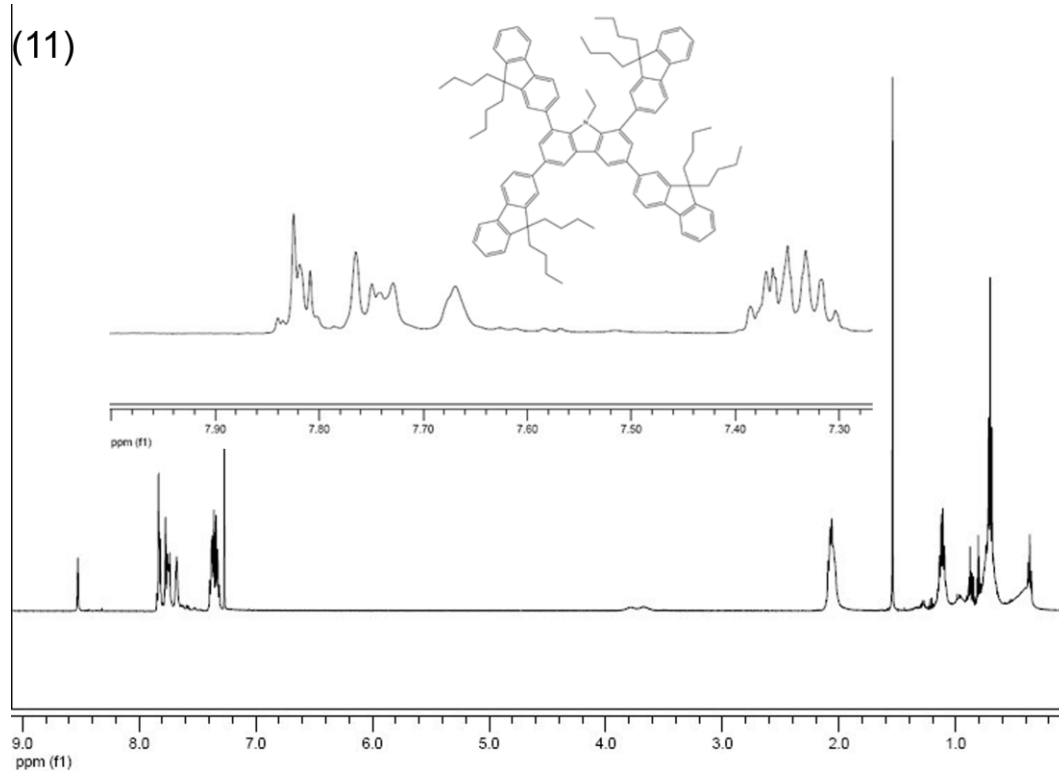
(9)



(10)



(11)



(12)

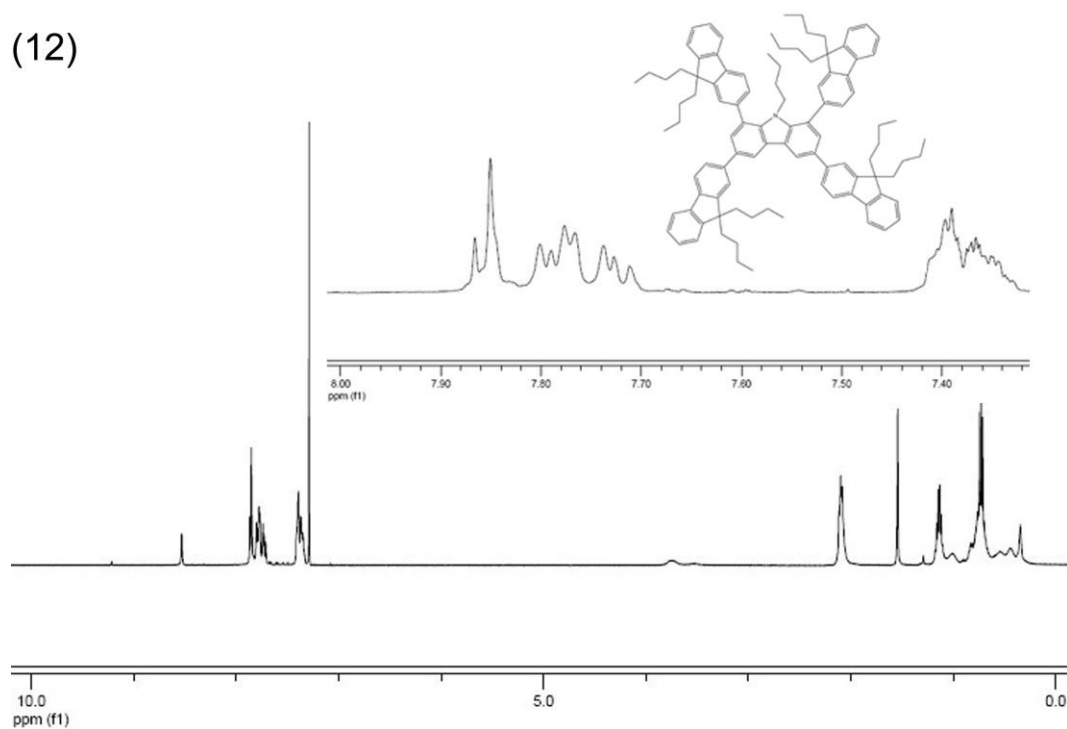
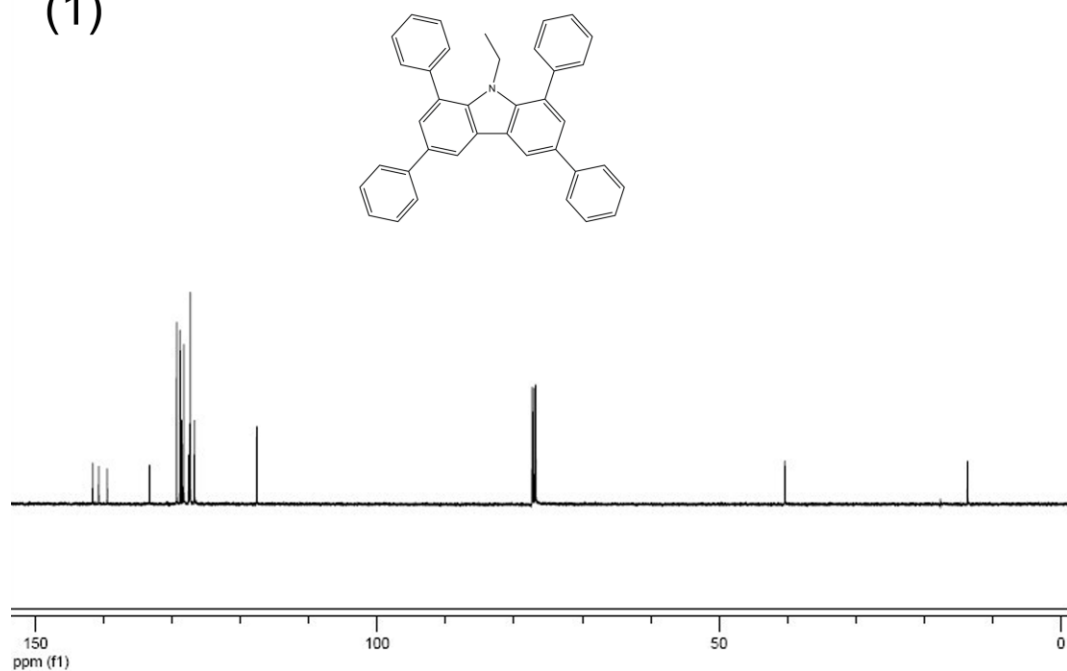
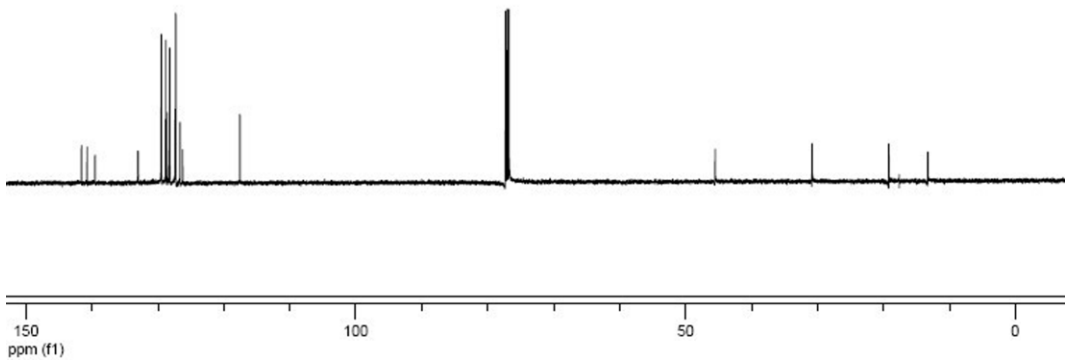
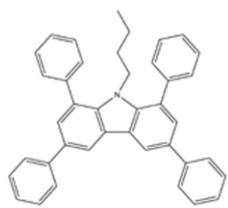


Fig. S1 ^1H -NMR of compounds 1-12 in CDCl_3 .

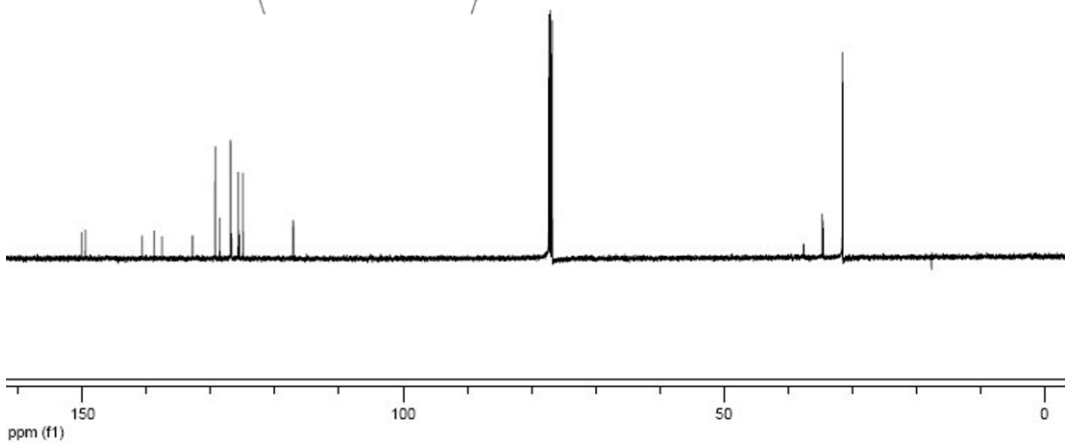
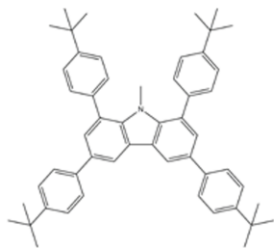
(1)

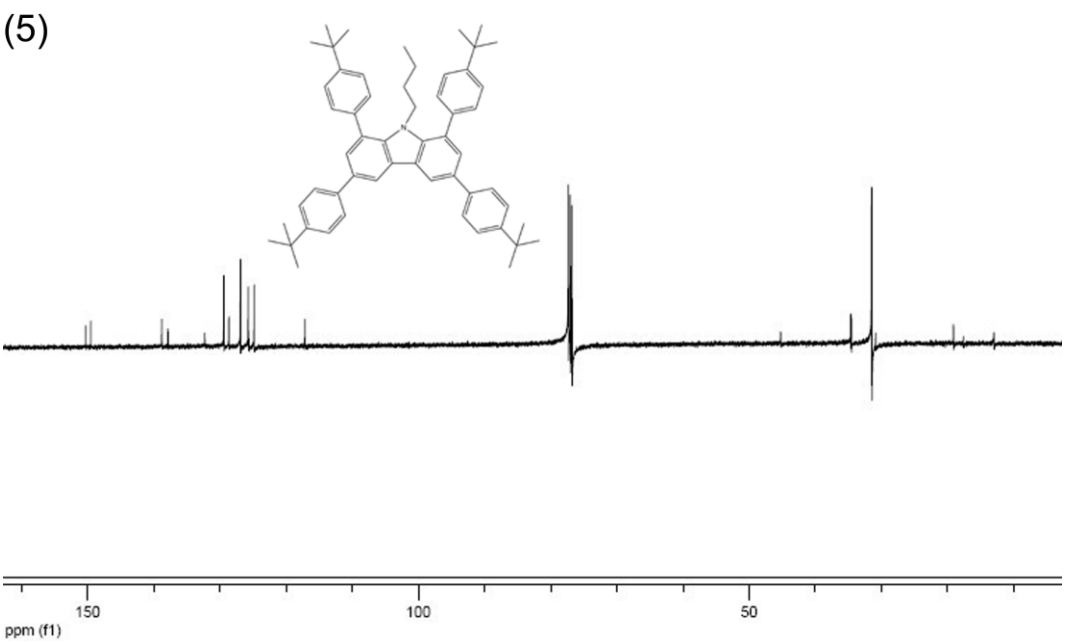
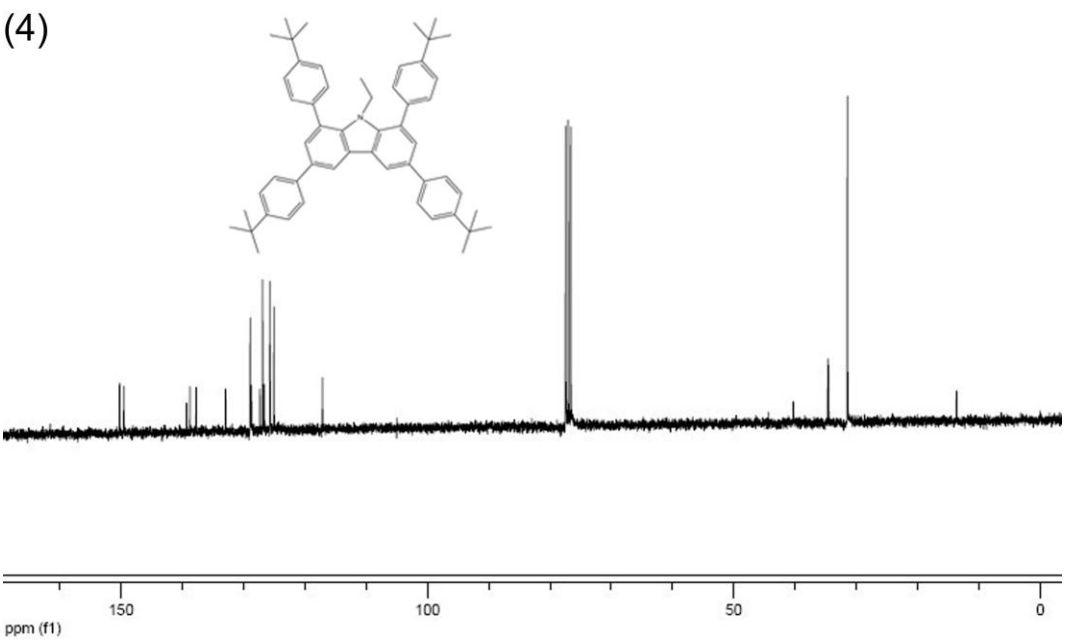


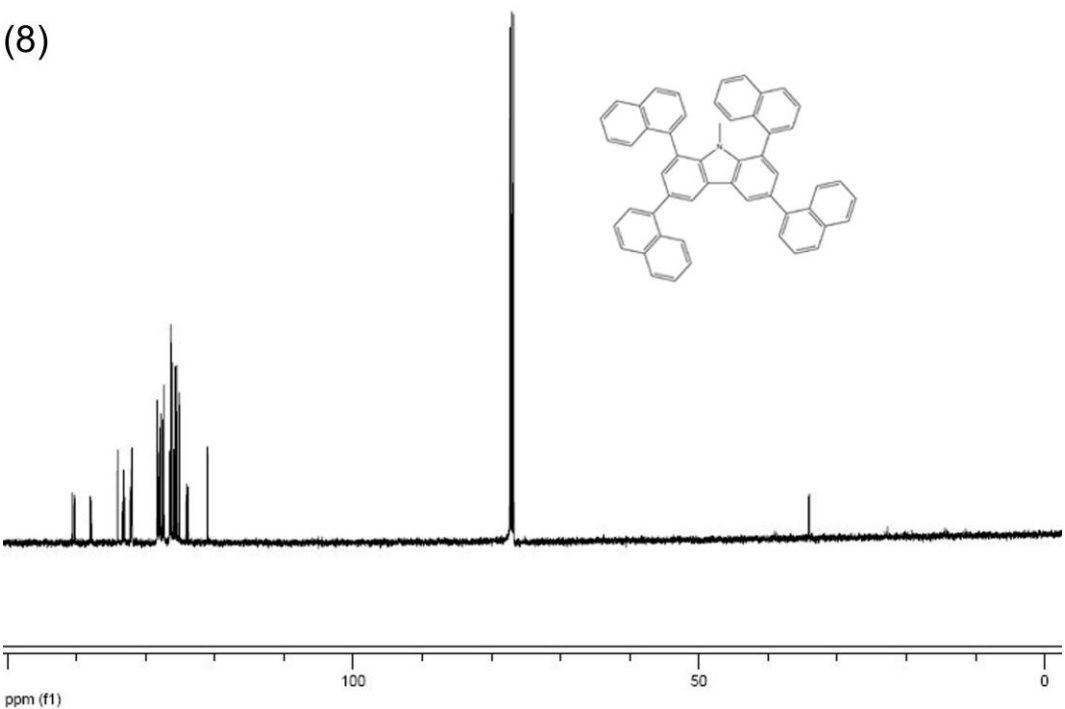
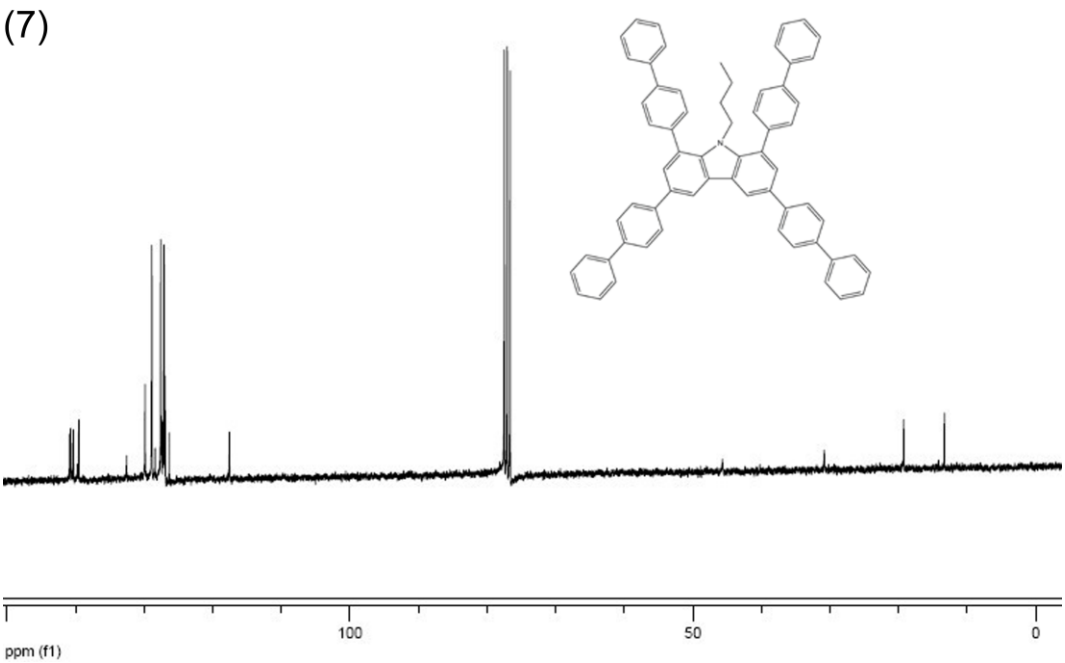
(2)



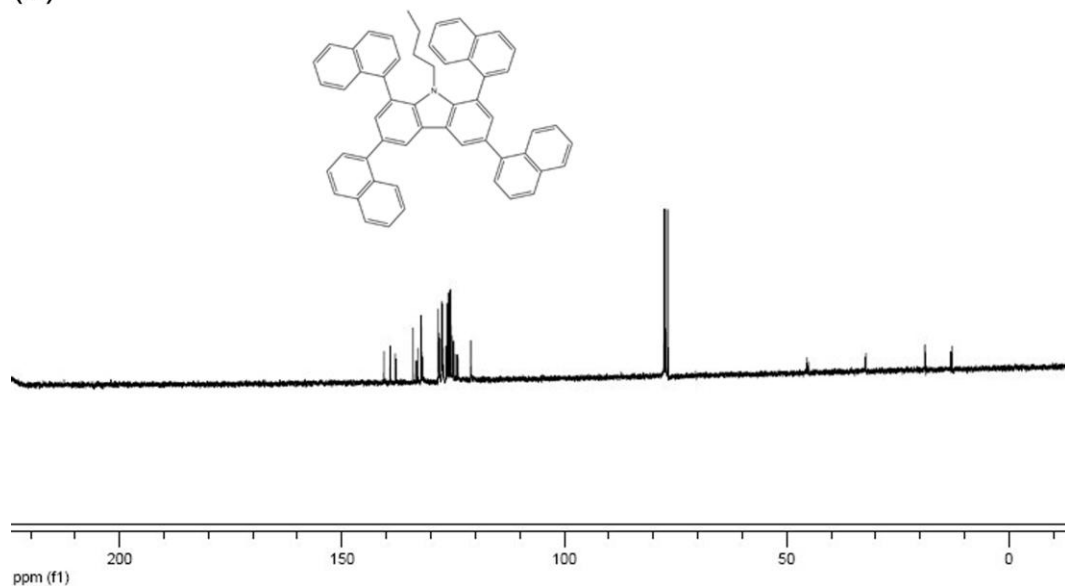
(3)



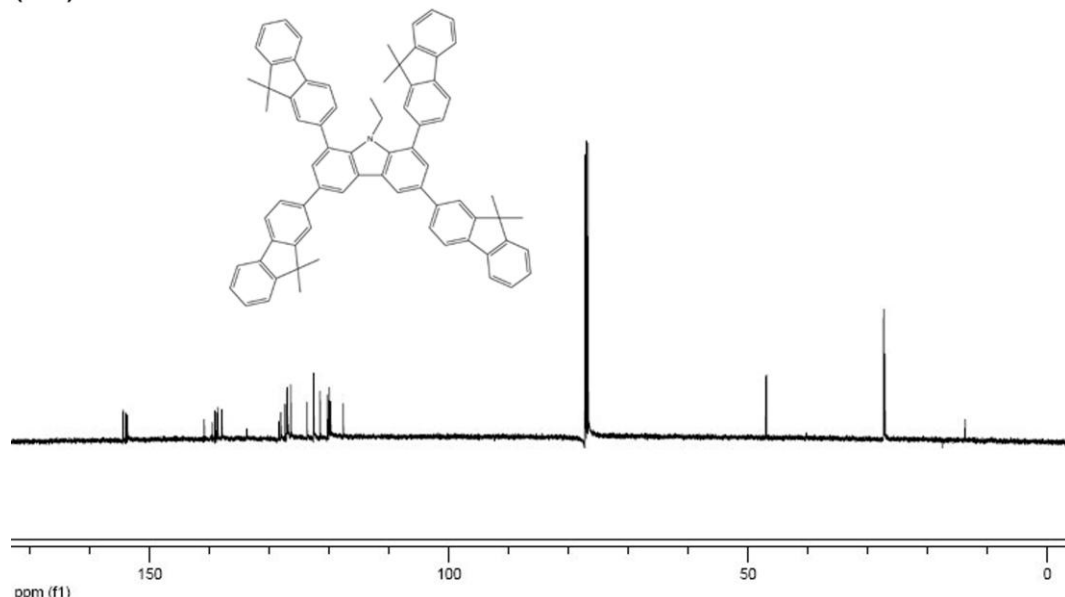




(9)



(10)



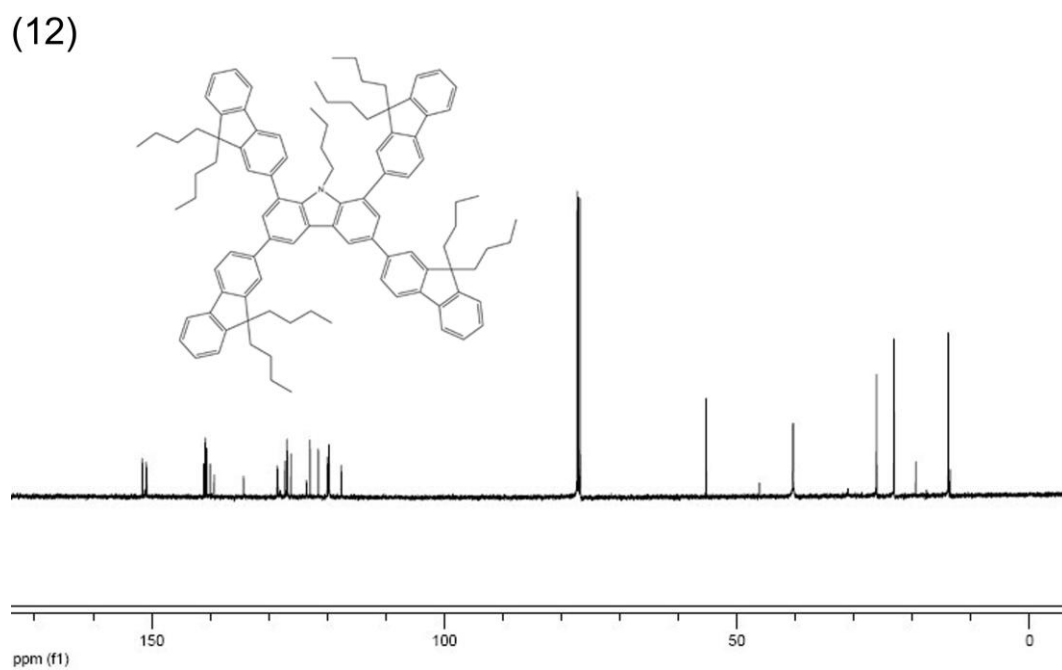
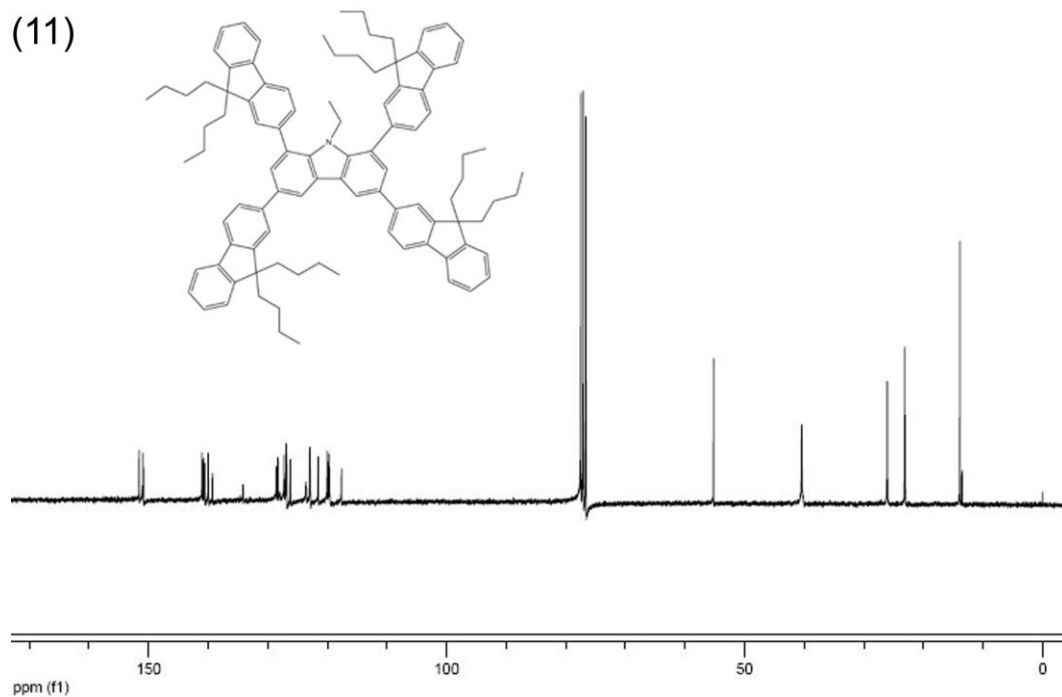
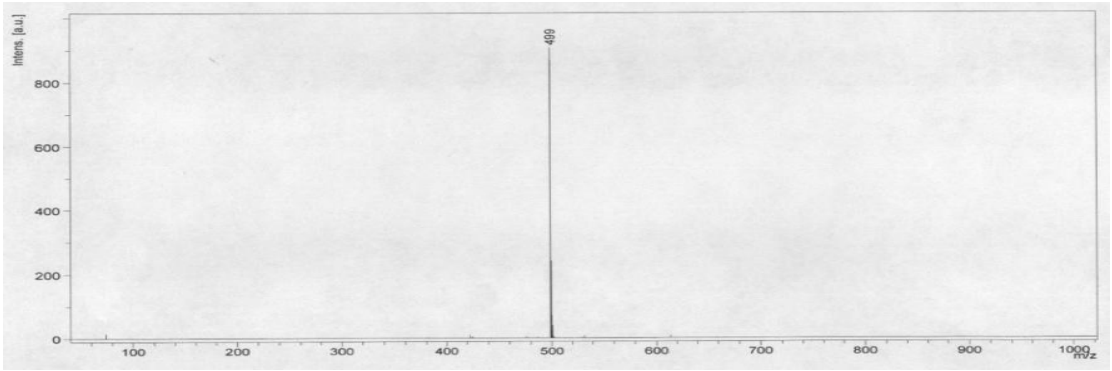
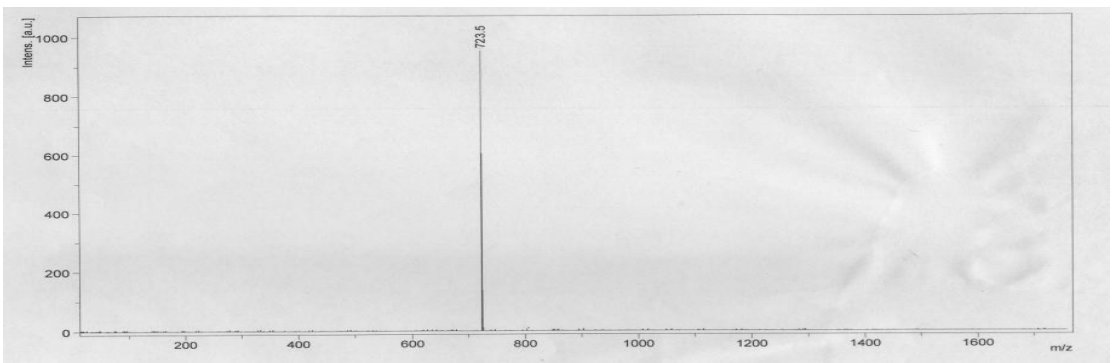


Fig. S2 ^{13}C -NMR of compounds 1-12 in CDCl_3 .

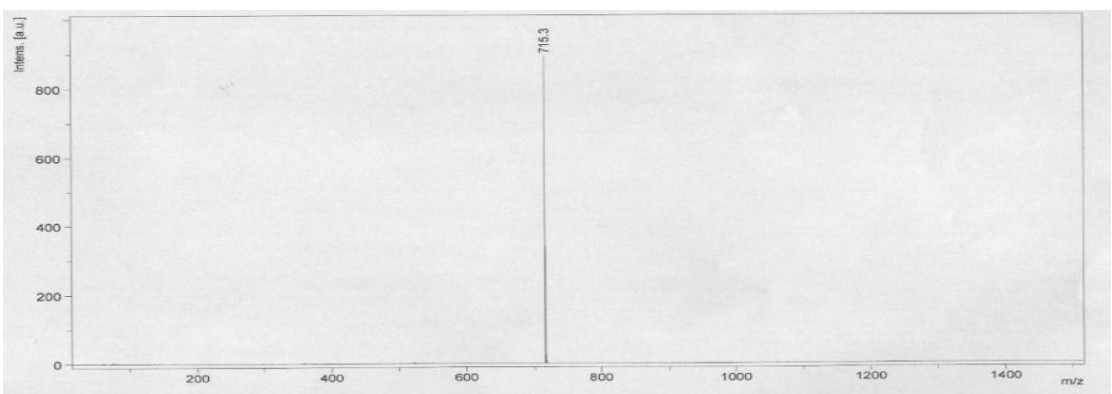
(1)



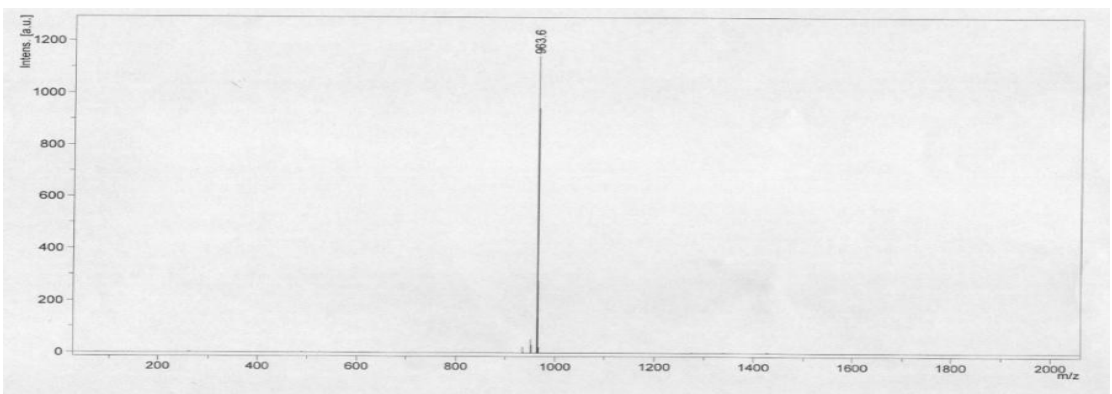
(4)



(6)



(10)



(11)

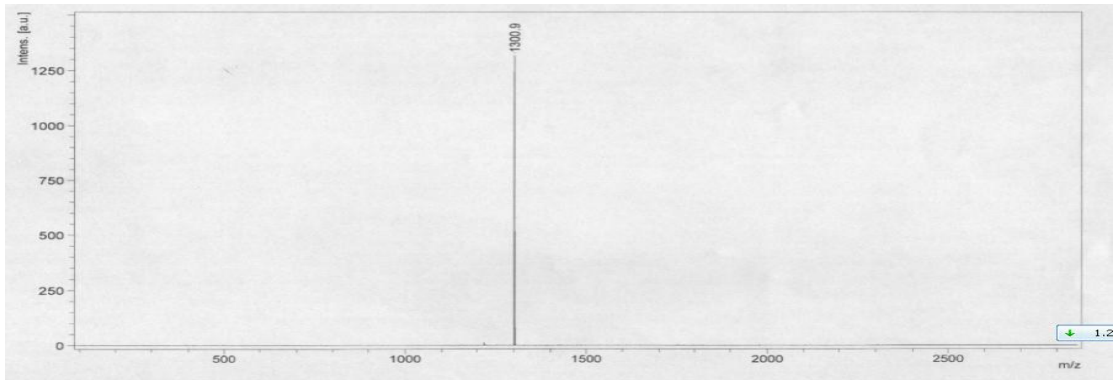
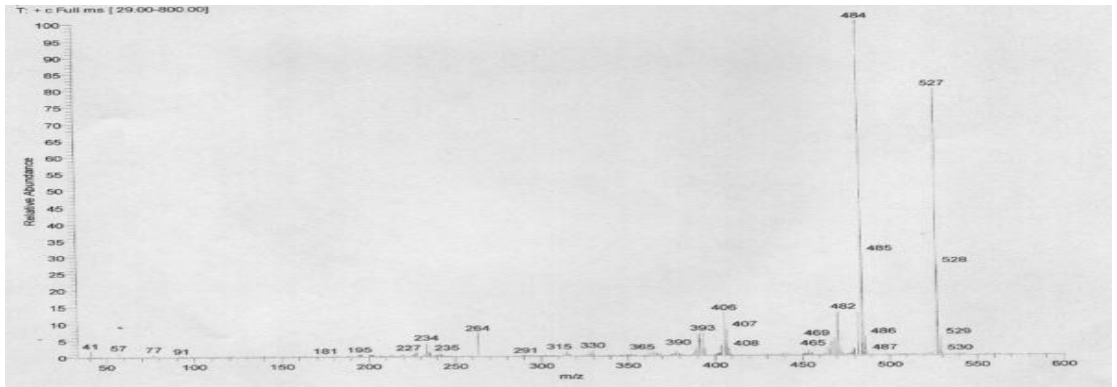
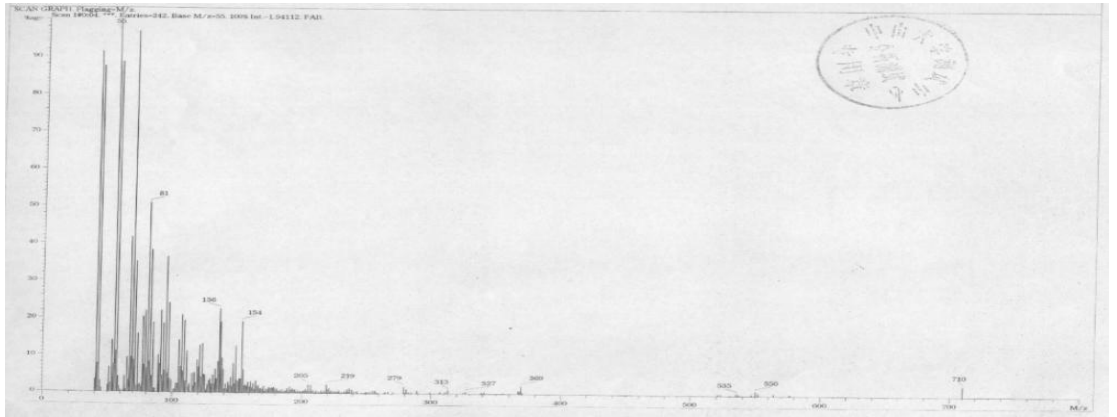


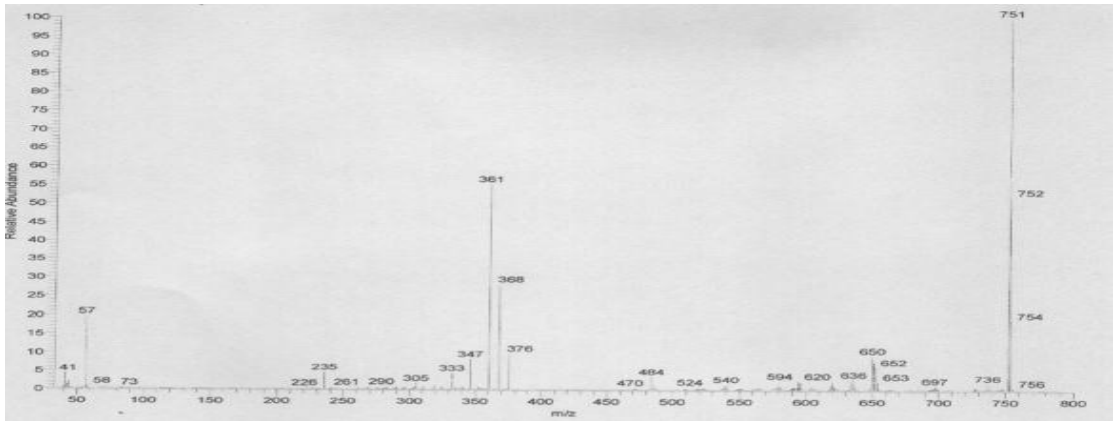
Fig. S3 MALDI-TOF-MS spectra of 1, 4, 6, 10 and 11.
(2)



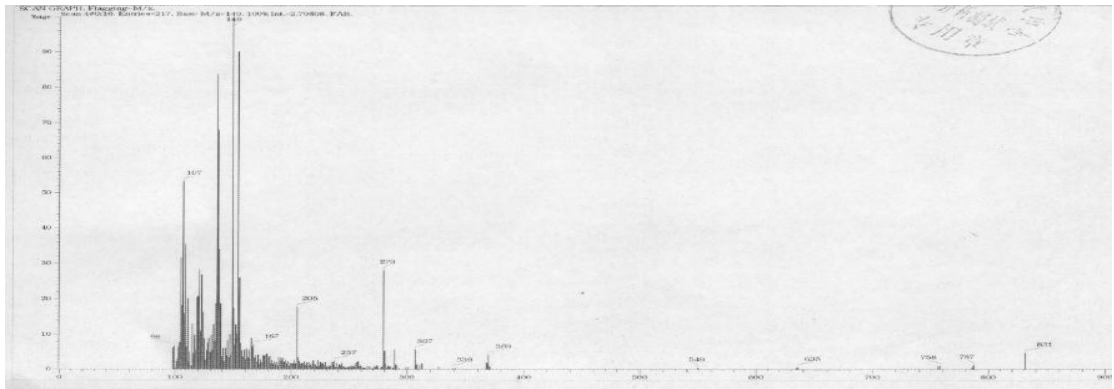
(3)



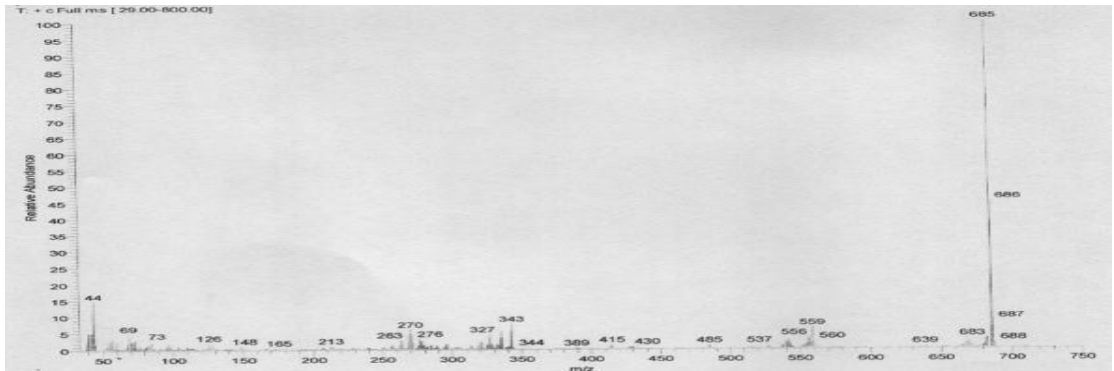
(5)



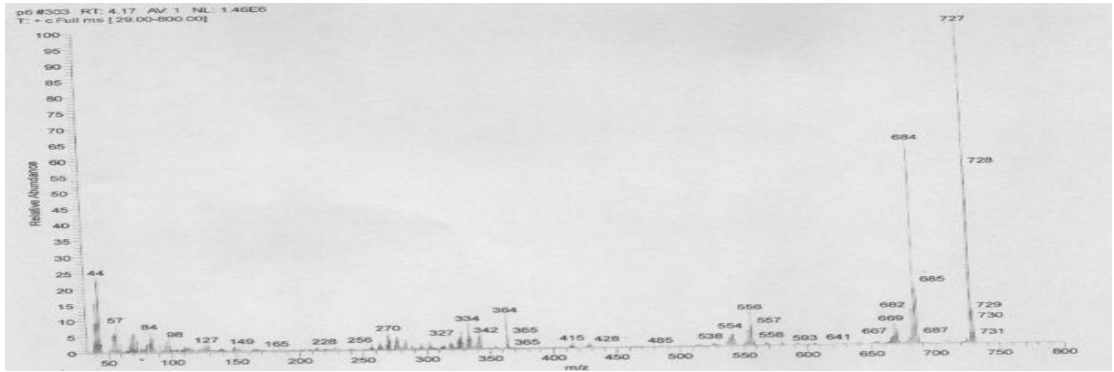
(7)



(8)



(9)



(12)

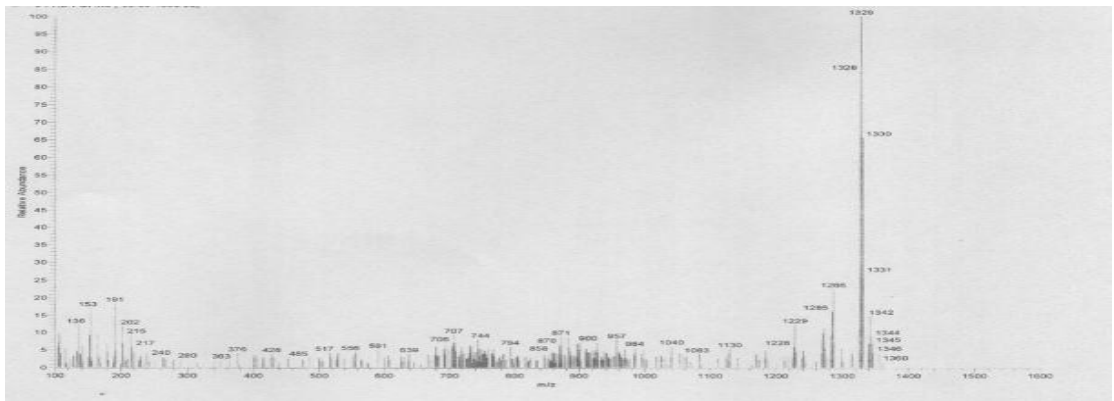


Fig. S4 FAB MS spectra of 2, 3, 5, 7, 8, 9 and 12.