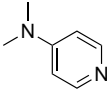
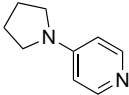


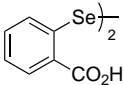
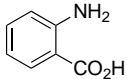
**4a**



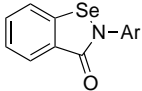
**DMAP**



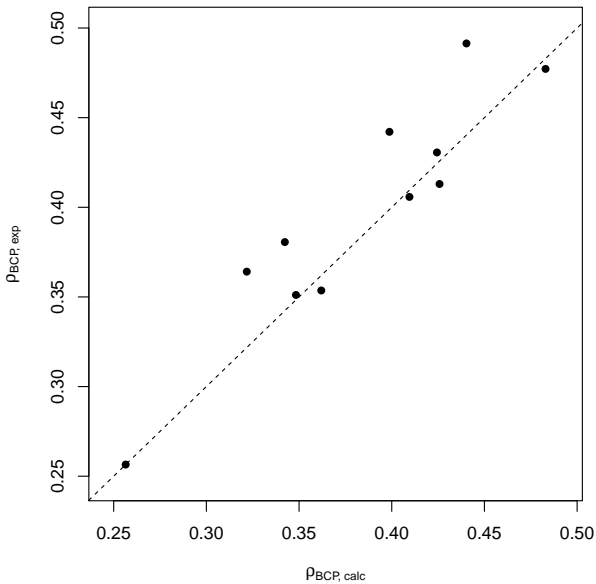
**4b**

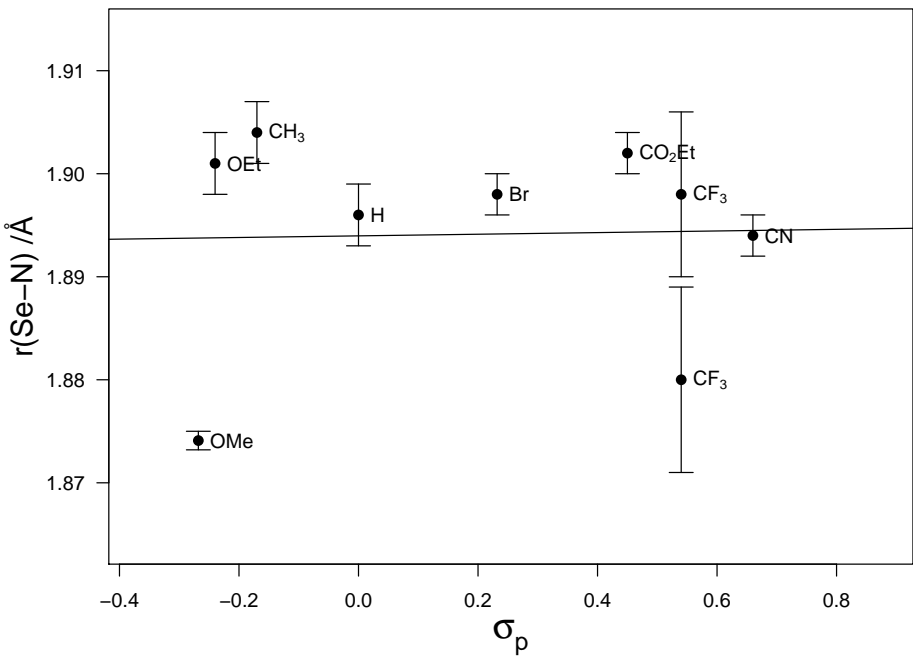


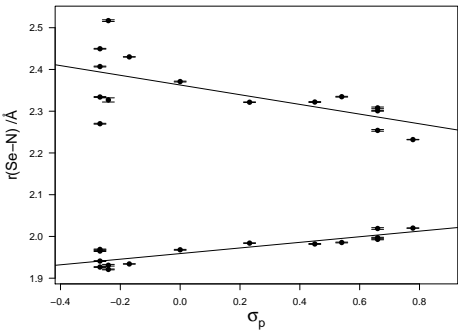
**5**

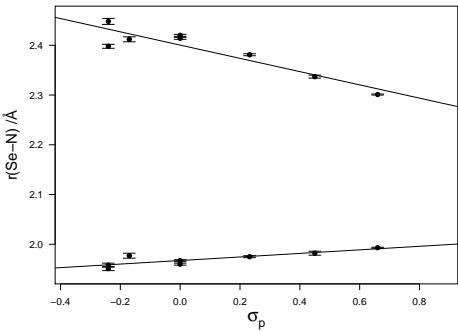


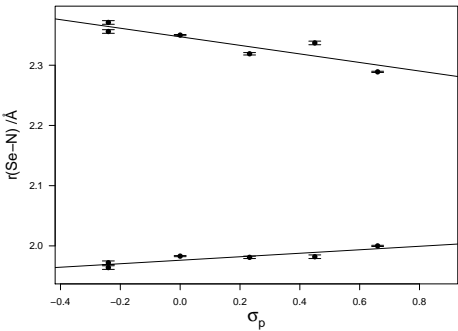
**1**

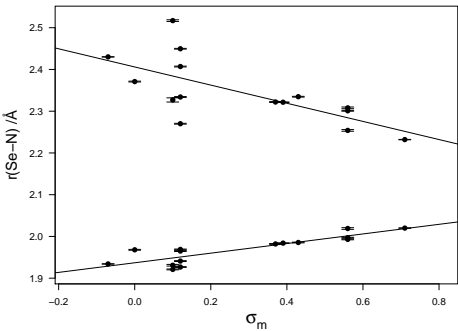




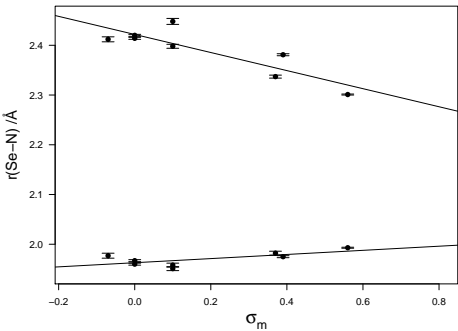


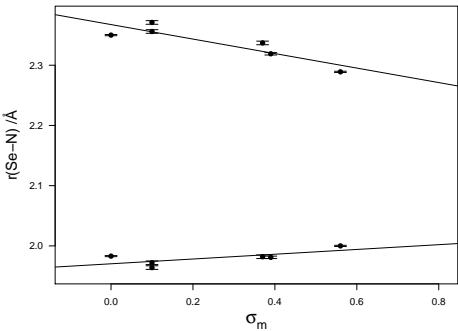


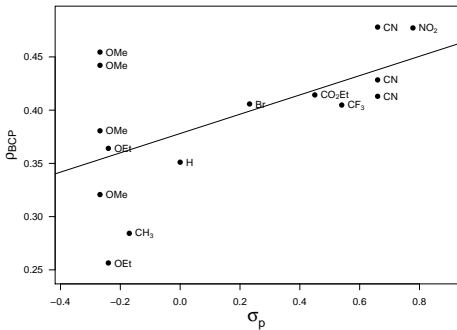


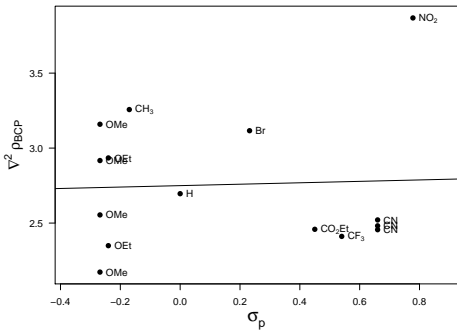


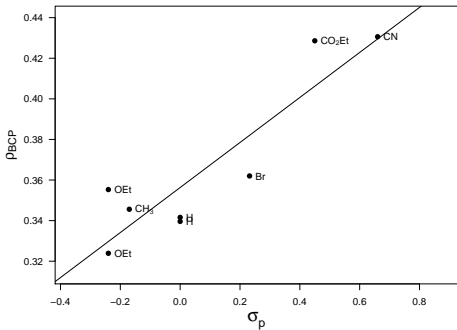


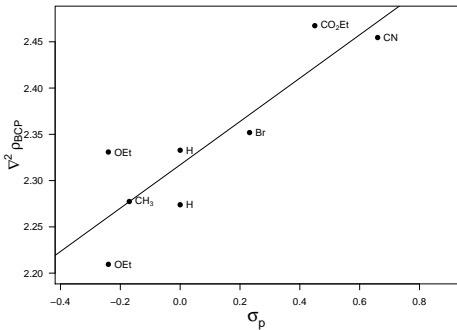


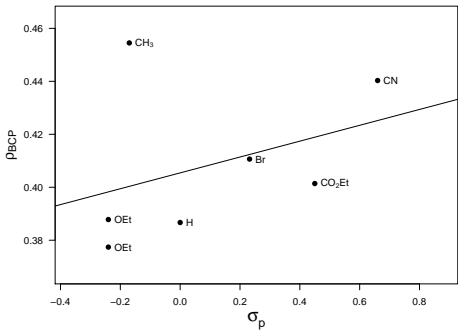


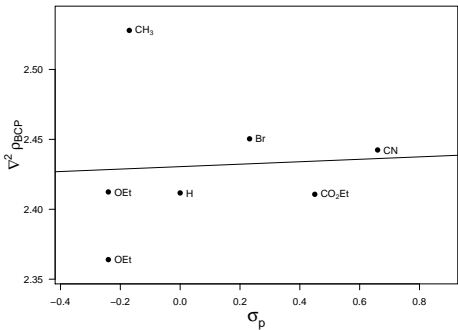




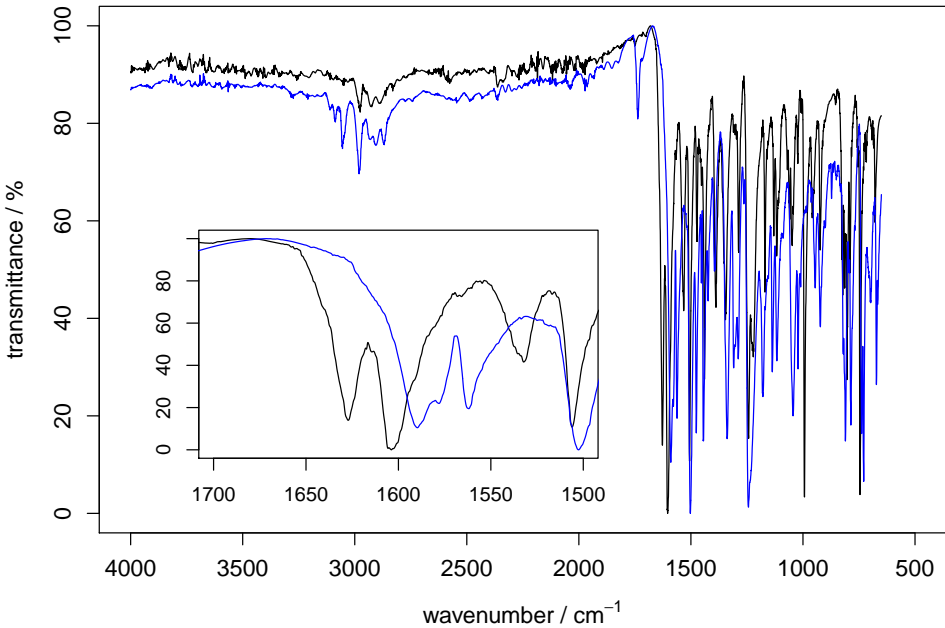


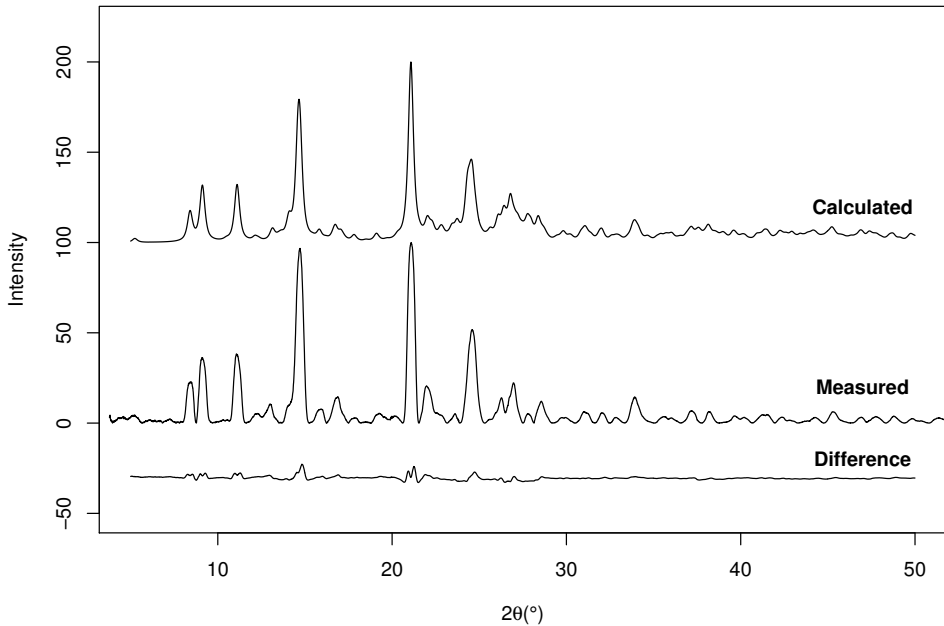


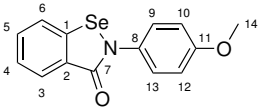
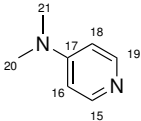


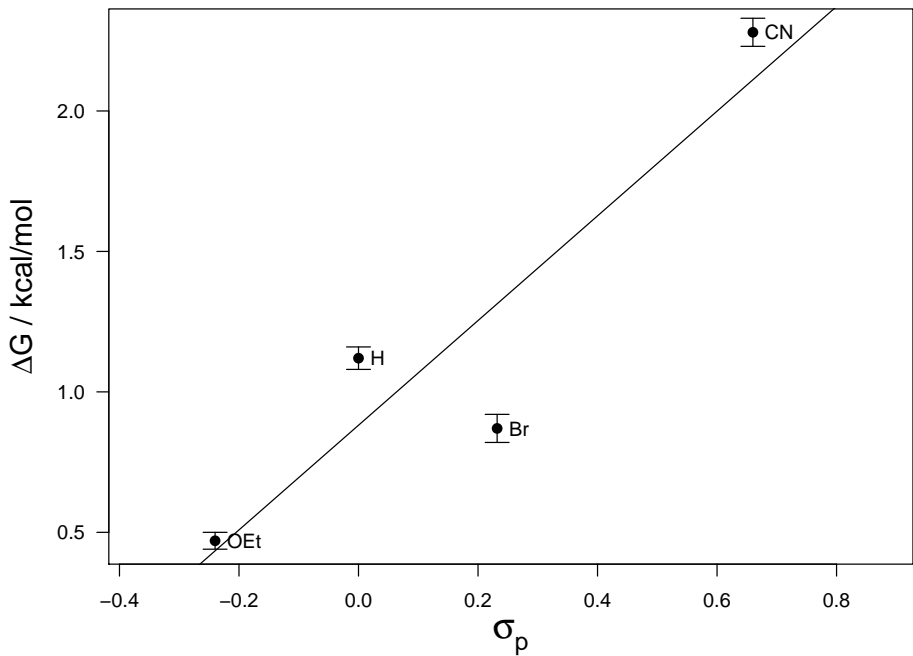


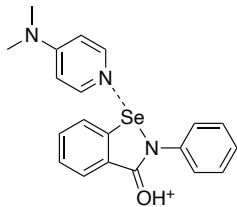






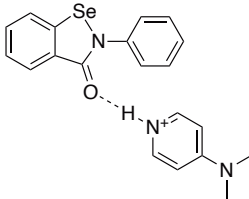




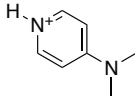


$m/z$ : 398.08

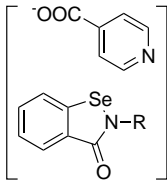
or



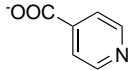
$m/z$ : 398.08



$m/z$ : 123.09



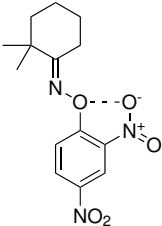
$m/z$ : 397.01



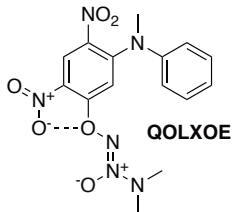
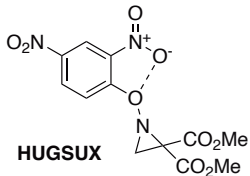
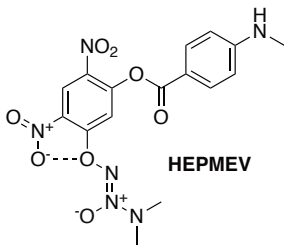
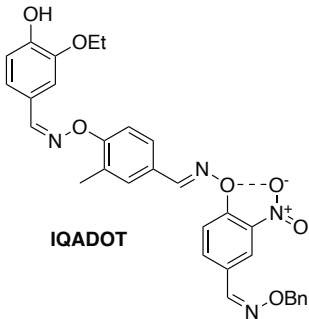
$m/z$ : 122.02

**1**      R = Ph

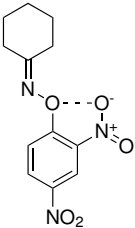
**1a**     R = Bn



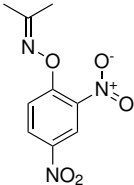
**7**



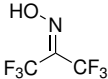
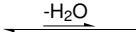
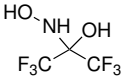


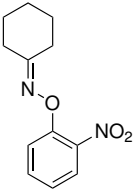


8

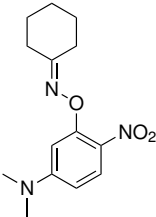


9

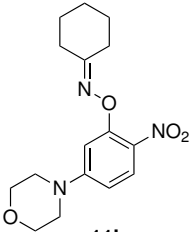




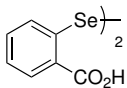
10



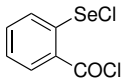
**11a**



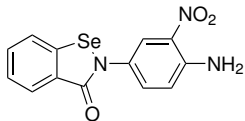
**11b**



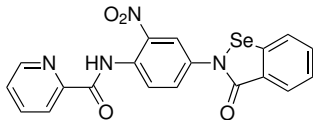
**5**



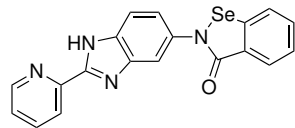
**6**



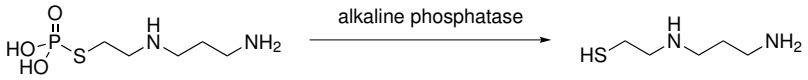
**15**

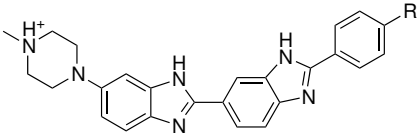


**14**



**13**



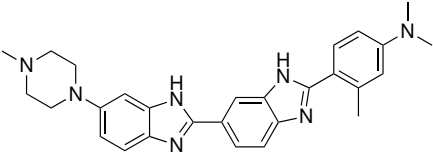


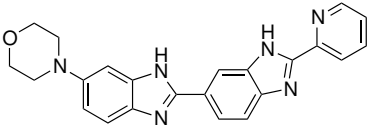
Hoechst 33258 R: OH

Hoechst 33342 R: OCH<sub>2</sub>CH<sub>3</sub>

Hoechst 34580 R: N(CH<sub>3</sub>)<sub>2</sub>

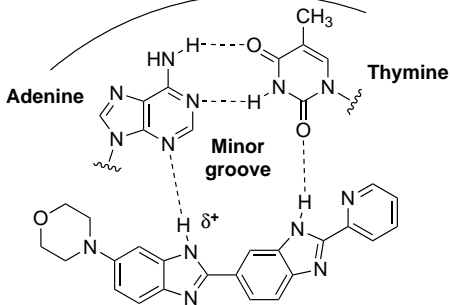




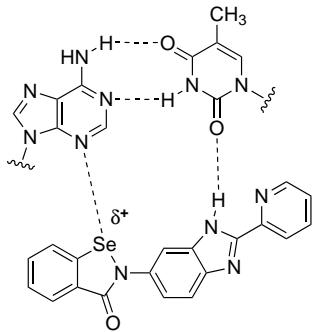


12

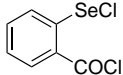
**Major groove**



**12**



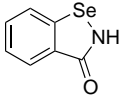
**13**



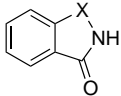
**6**

$\text{NH}_3$  (aq)

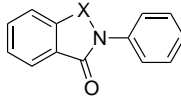
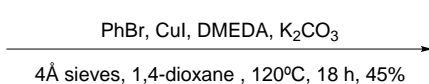
MeCN, rt, 10 min, 87%



**1b**

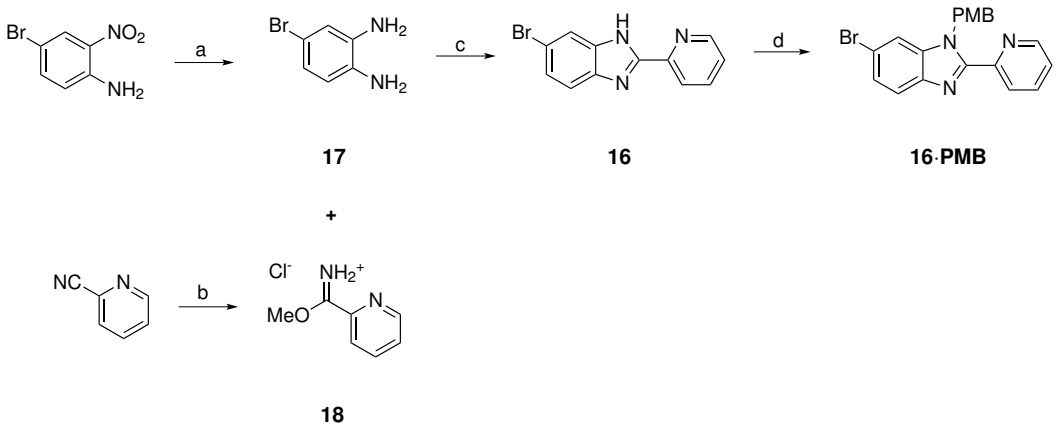


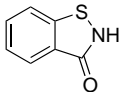
**1b** and **1b-S**



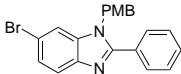
**1** and **1-S**

X = S, Se





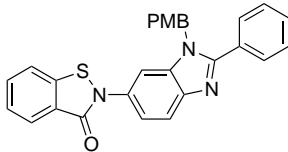
**1b·S**



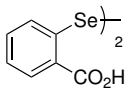
**19·PMB**

CuI, DMEDA, K<sub>2</sub>CO<sub>3</sub>

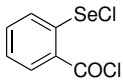
4 Å sieves, 1,4-dioxane, 120°C, 24 h, 48%



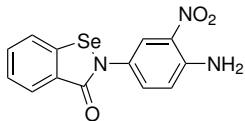
**20·S·PMB**



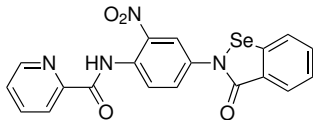
**5**



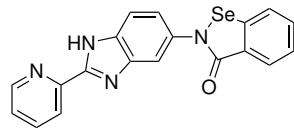
**6**



**15**

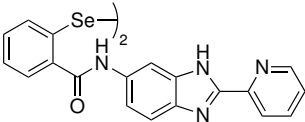


**14**



**13**





**21**

