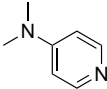
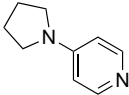


**4a**

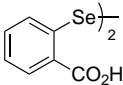
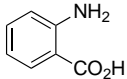


**DMAP**

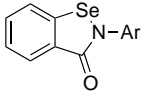


**4b**

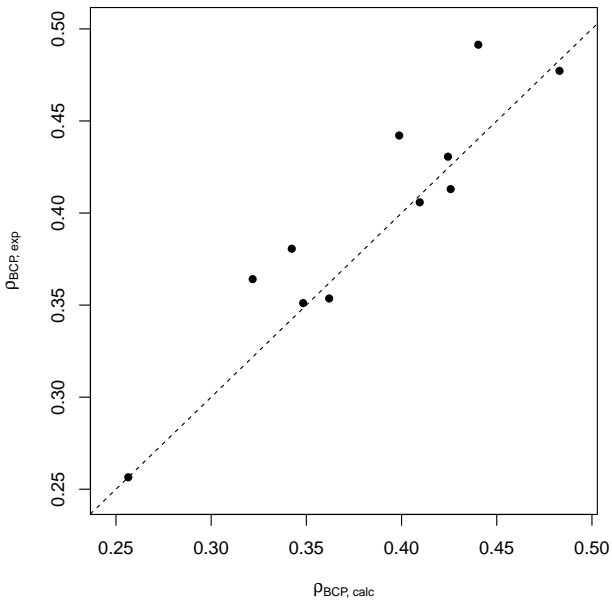


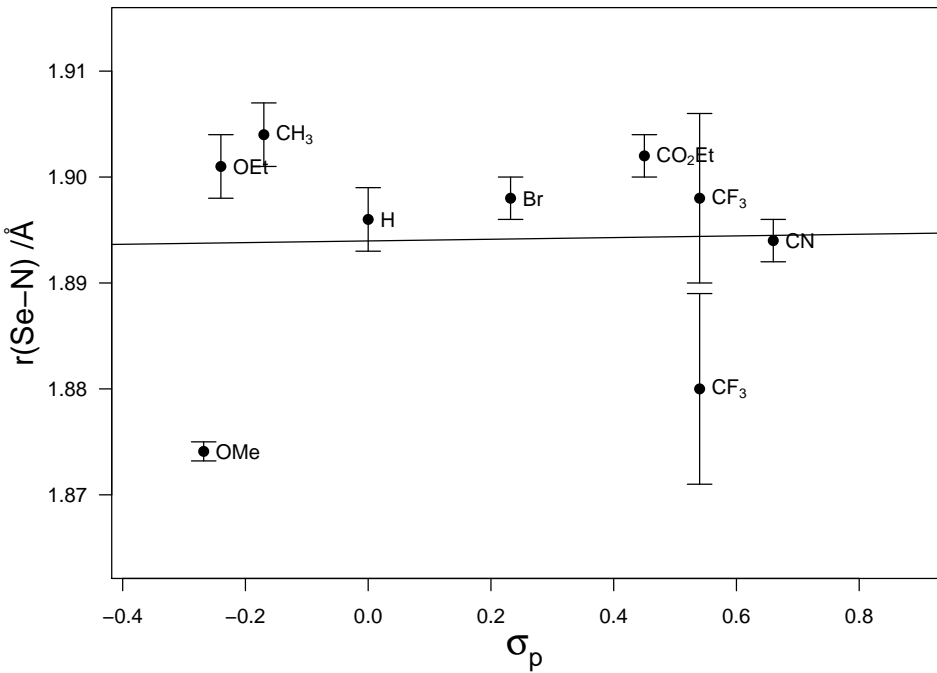


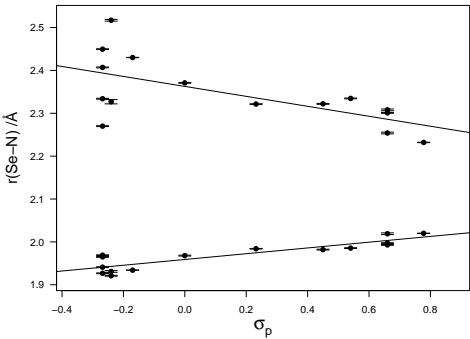
**5**

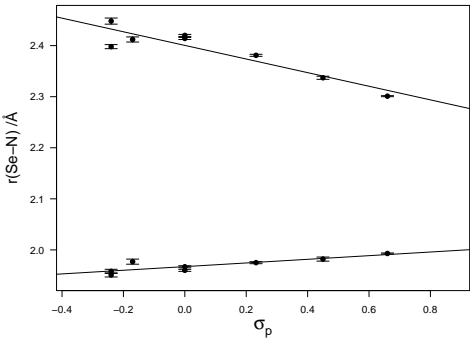


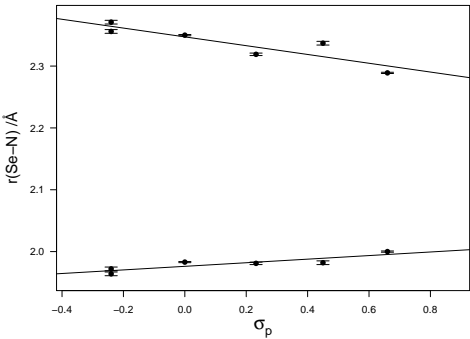
**1**

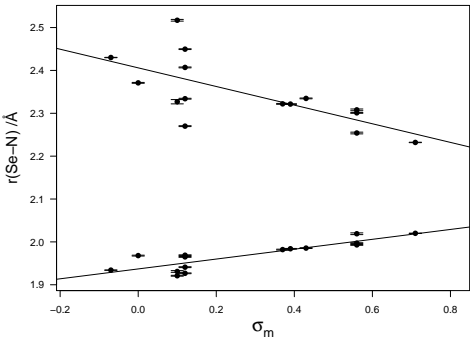


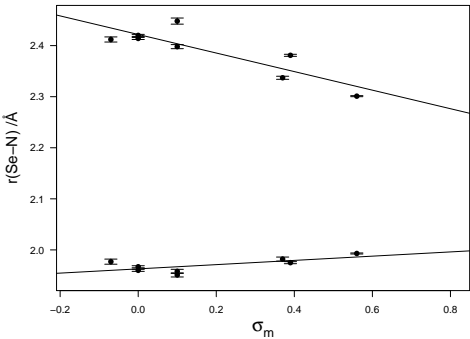




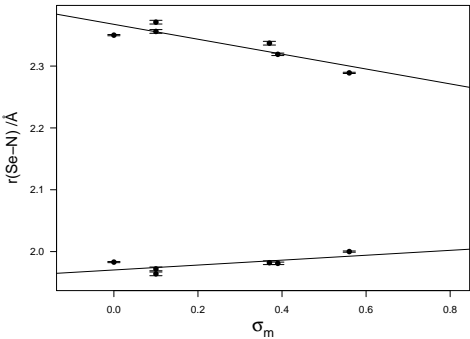


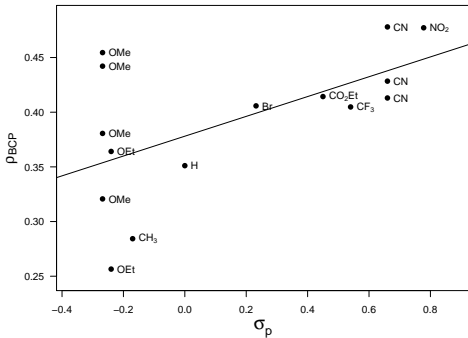


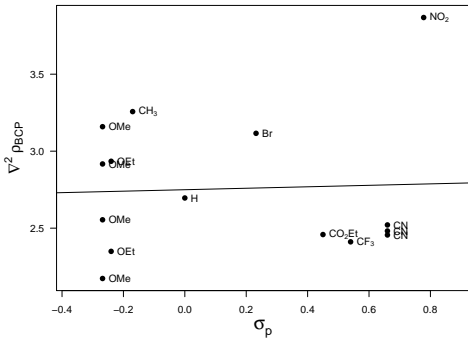


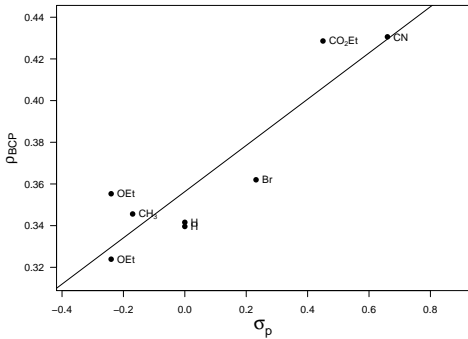


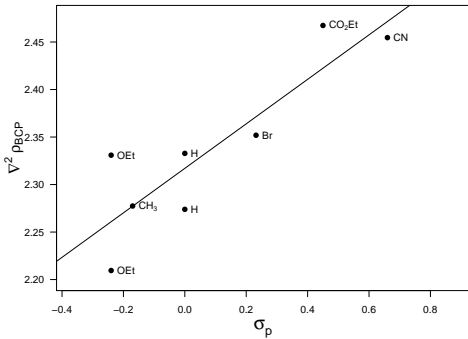


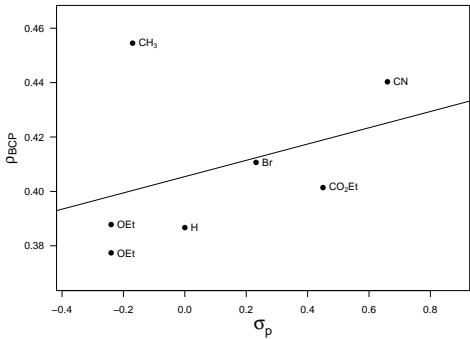


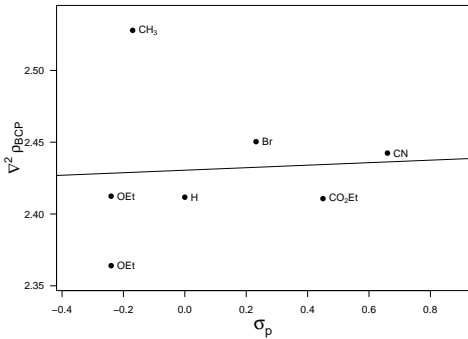


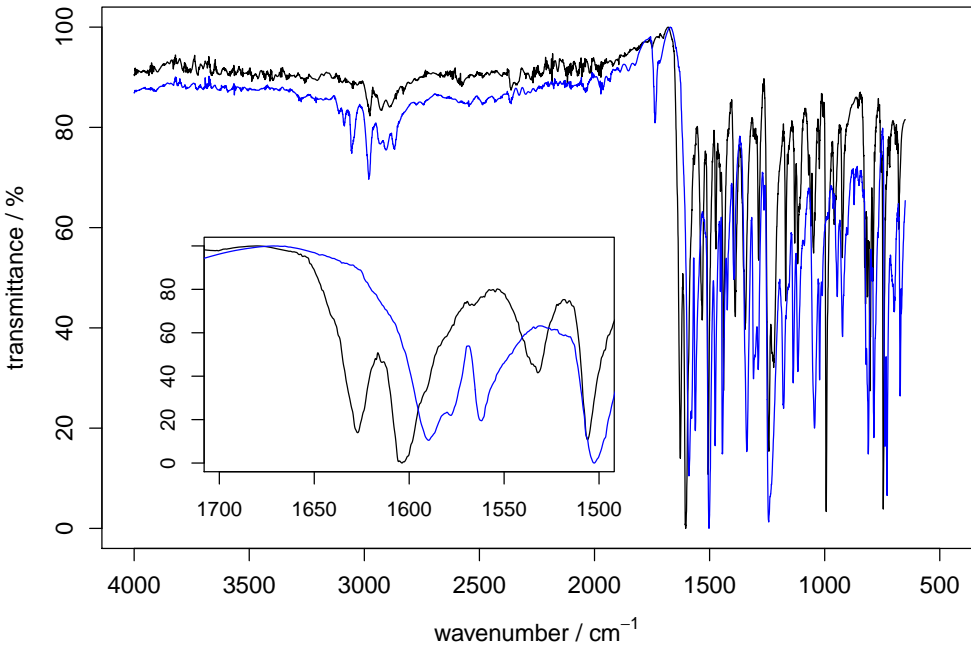




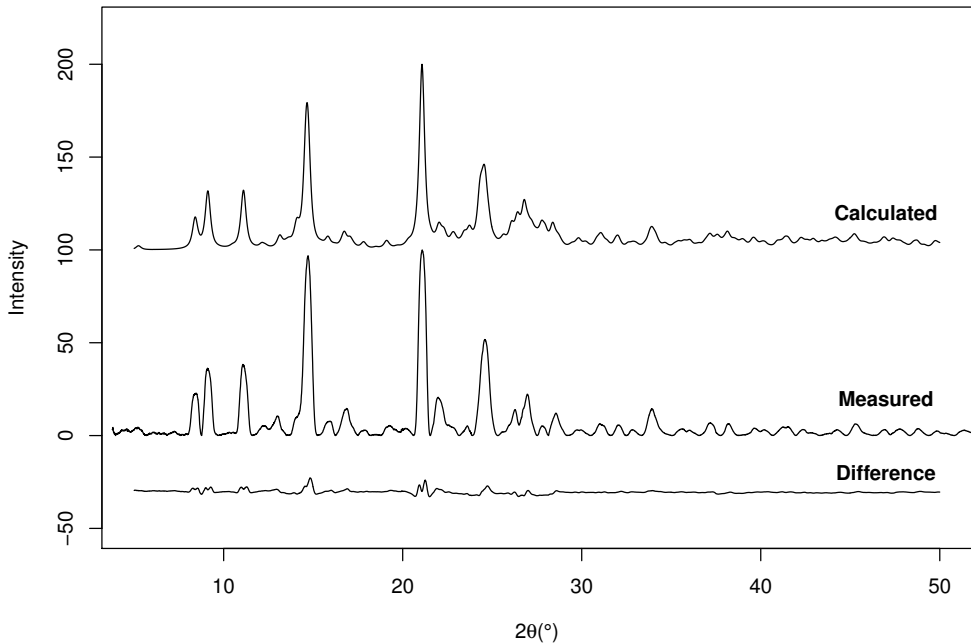


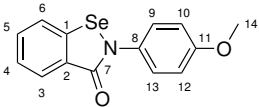
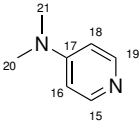


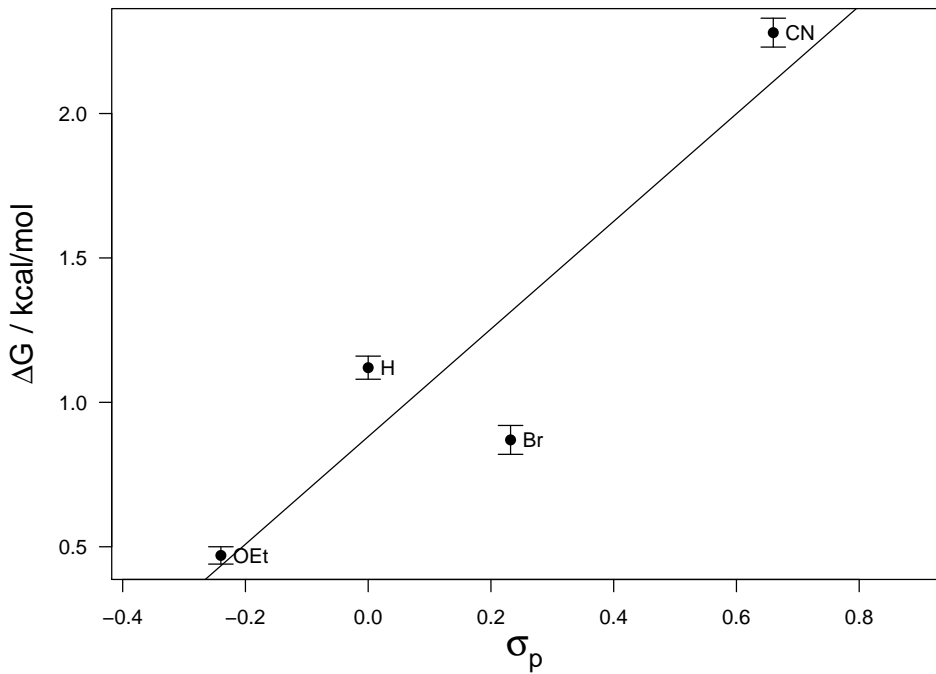


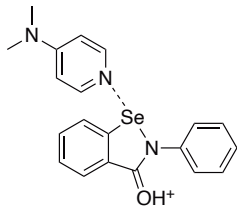






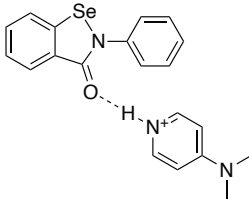




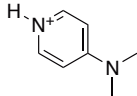


$m/z$ : 398.08

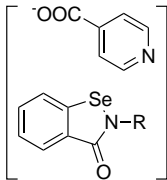
or



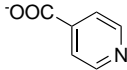
$m/z$ : 398.08



$m/z$ : 123.09



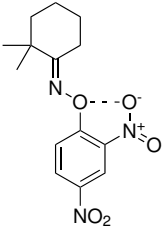
$m/z$ : 397.01



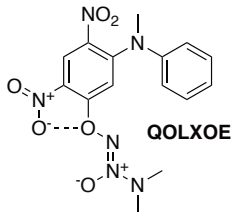
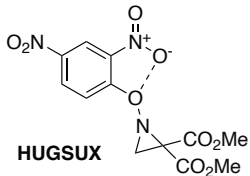
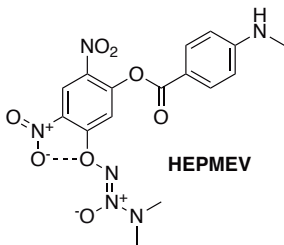
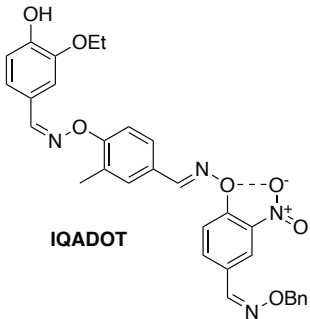
$m/z$ : 122.02

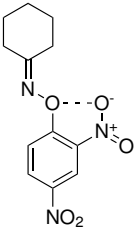
**1**       $R = \text{Ph}$

**1a**      $R = \text{Bn}$

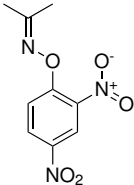


**7**



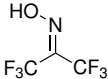
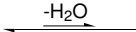
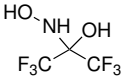


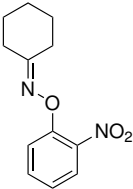
**8**



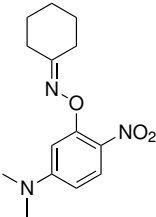
**9**



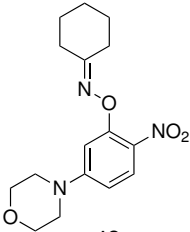




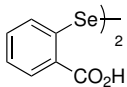
10



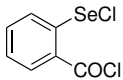
11



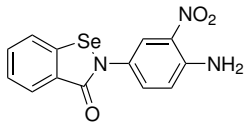
**12**



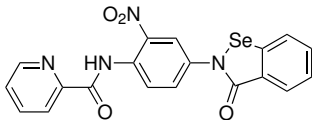
**5**



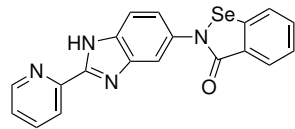
**6**



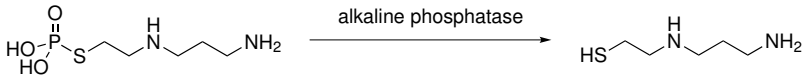
**16**

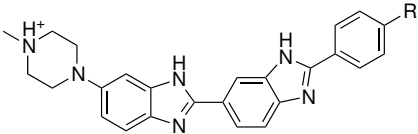


**15**



**14**

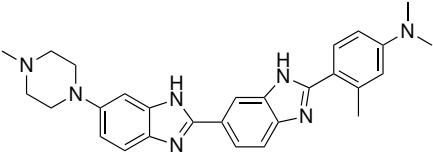




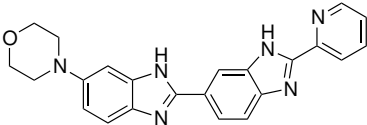
Hoechst 33258 R: OH

Hoechst 33342 R:  $\text{OCH}_2\text{CH}_3$

Hoechst 34580 R:  $\text{N}(\text{CH}_3)_2$

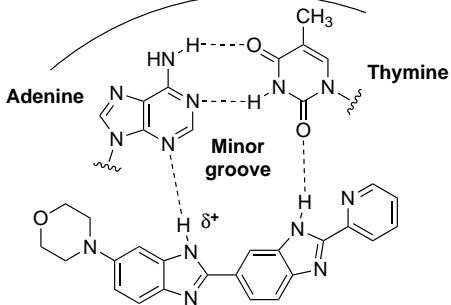




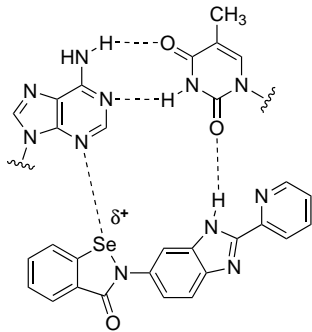


13

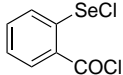
**Major groove**



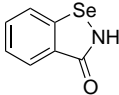
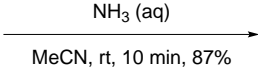
**13**



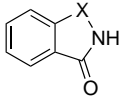
**14**



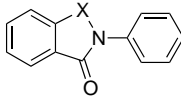
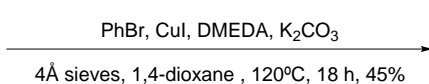
**6**



**1b**

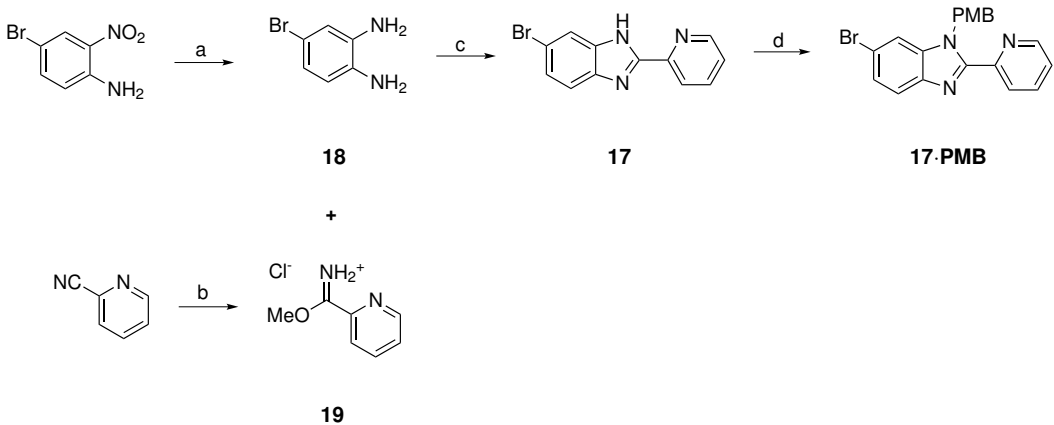


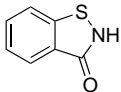
**1b and 1b-S**



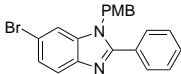
**1 and 1-S**

X = S, Se





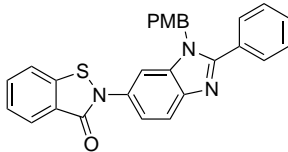
**1b-S**



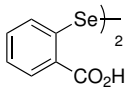
**20-PMB**

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

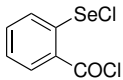
4 Å sieves, 1,4-dioxane, 120°C, 24 h, 48%



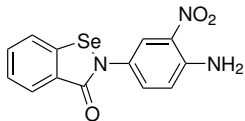
**21-S-PMB**



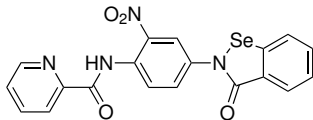
**5**



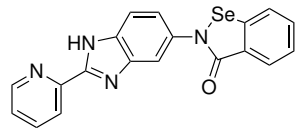
**6**



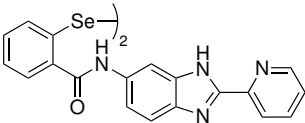
**16**



**15**



**14**



22



