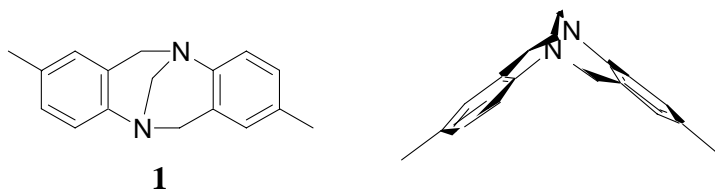


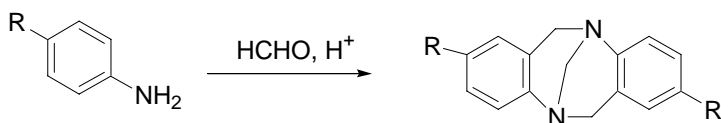
## 10. Recent Developments in Tröger's Base Chemistry

### 10.1. Introduction

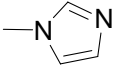
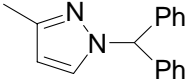
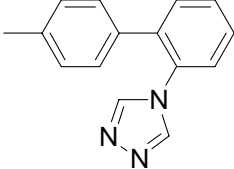
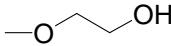
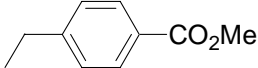
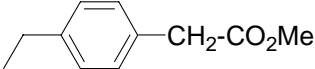
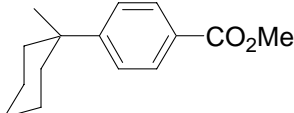


### 10.2. Synthesis of Substituted Tröger's Base Analogues

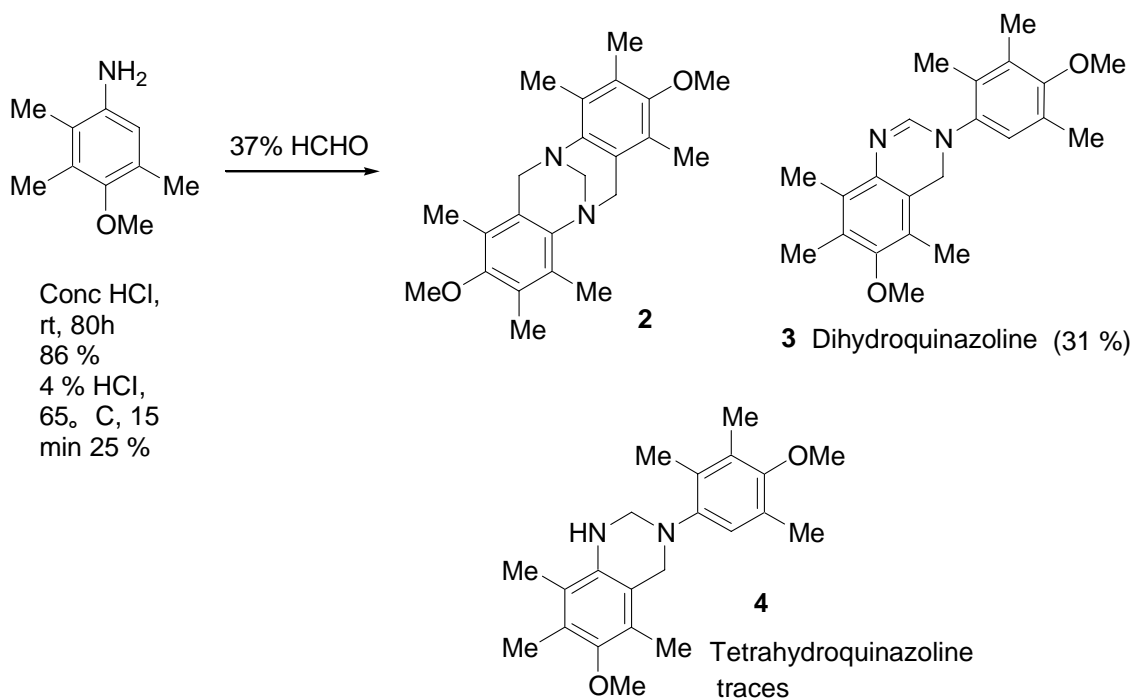
#### 10.2.1. *para*-Substituted analogues

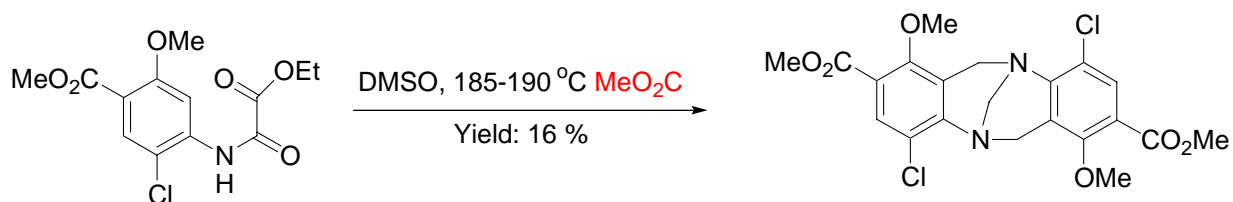
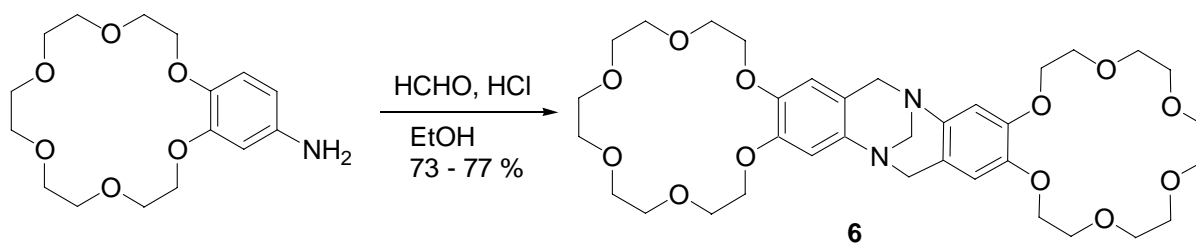
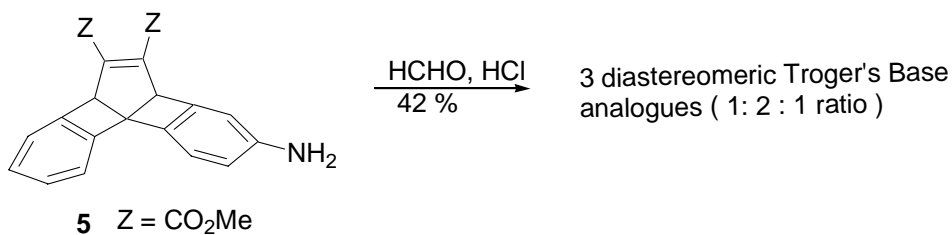
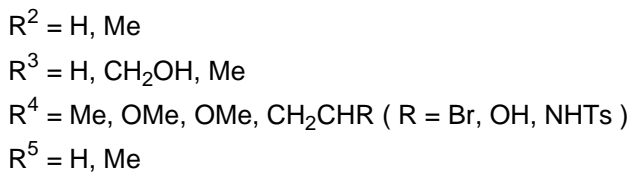
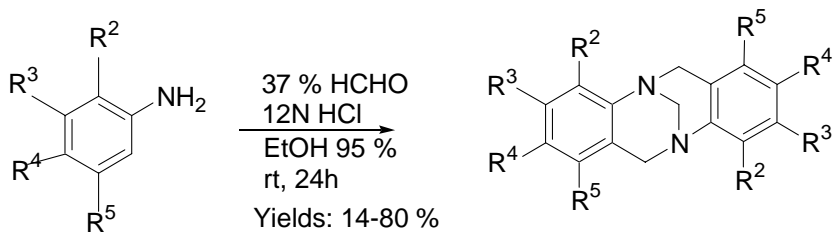


R	Method	Yield	Ref.	R	Method	Yield	Ref.
—CH <sub>3</sub>	A B C D	- 60 44 41	1 2, 3, 4 5 6		D	67	6
—CH <sub>2</sub> NPhth	B	33a	7		D	26	6
—(CH <sub>2</sub> ) <sub>2</sub> OH	B	46	2, 7	—CH <sub>2</sub> CO <sub>2</sub> Me	B C	11 44	5
—(CH <sub>2</sub> ) <sub>2</sub> Br	B	22 37	2 7	—(CH <sub>2</sub> ) <sub>2</sub> -CO <sub>2</sub> Me	C	46	5
	B	25	7	—OMe	C	47	5
—(CH <sub>2</sub> ) <sub>2</sub> -NHTs	B	30	2	—Cl	C	0	5
—CH <sub>2</sub> -NHTs	B	21	2	—I	C	0	5

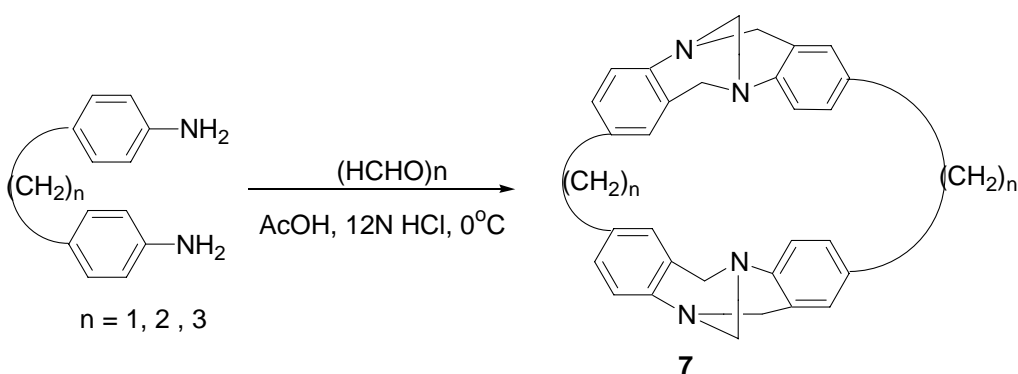
R	Method	Yield	Ref.
	B	30	8
	D	60	8
	B	30	8
	B	25	9
	D	45	10
	D	40	10
	D	38	10

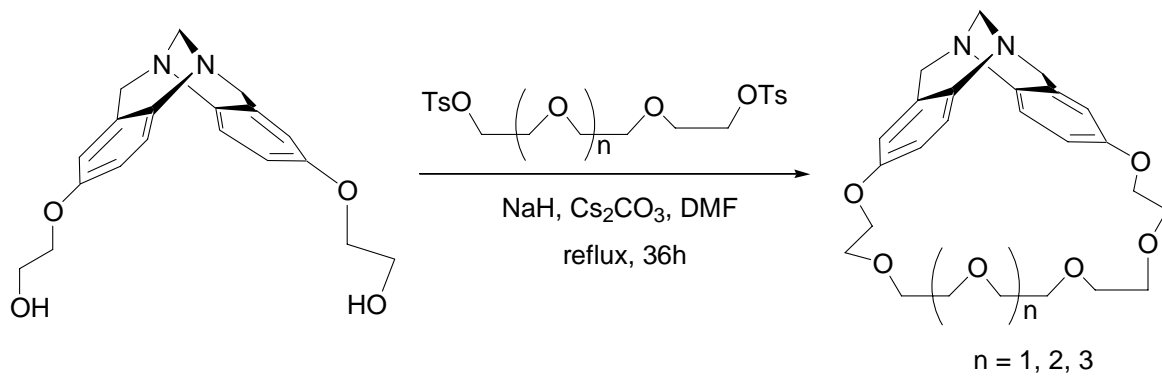
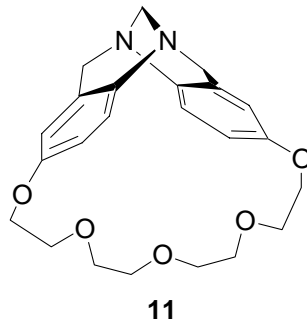
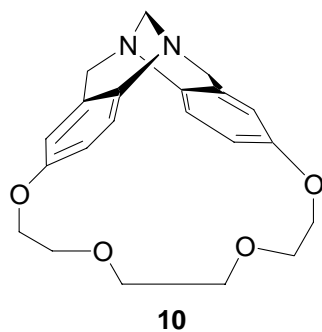
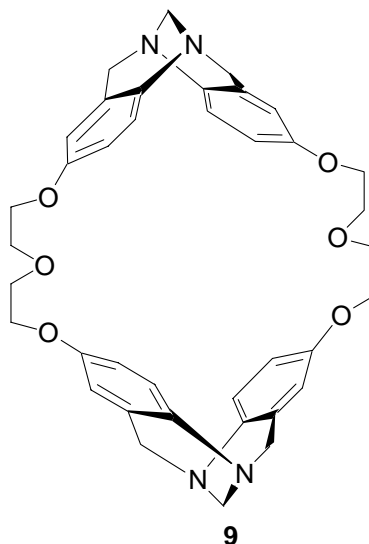
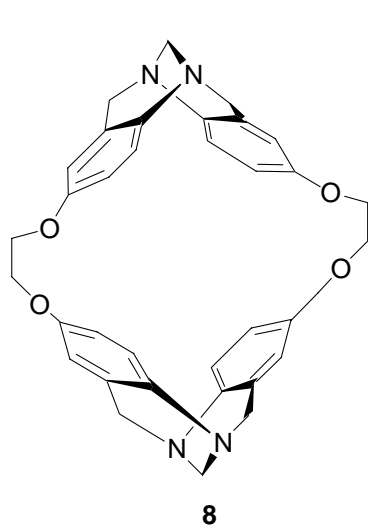
### 10.2.2. Polysubstituted analogues

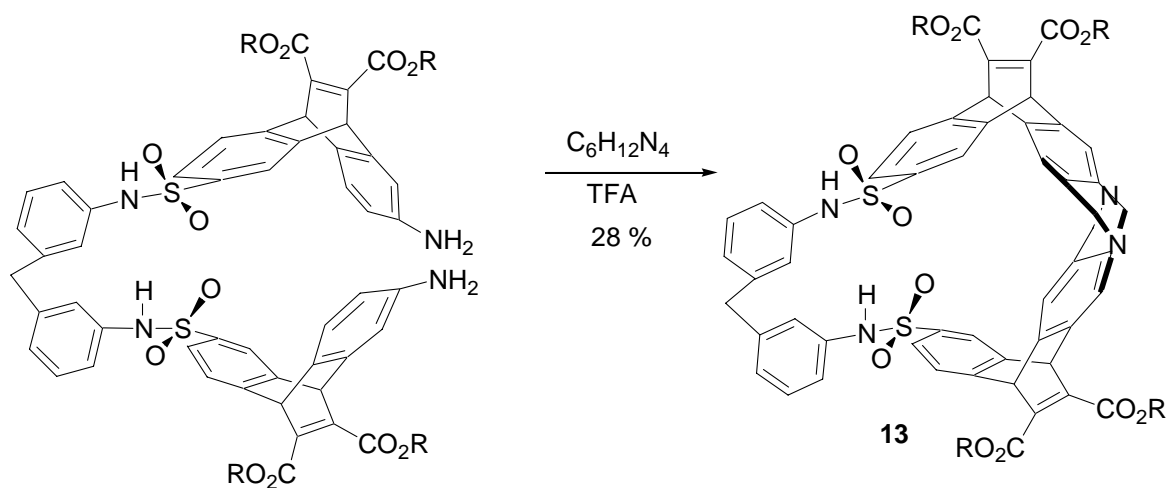




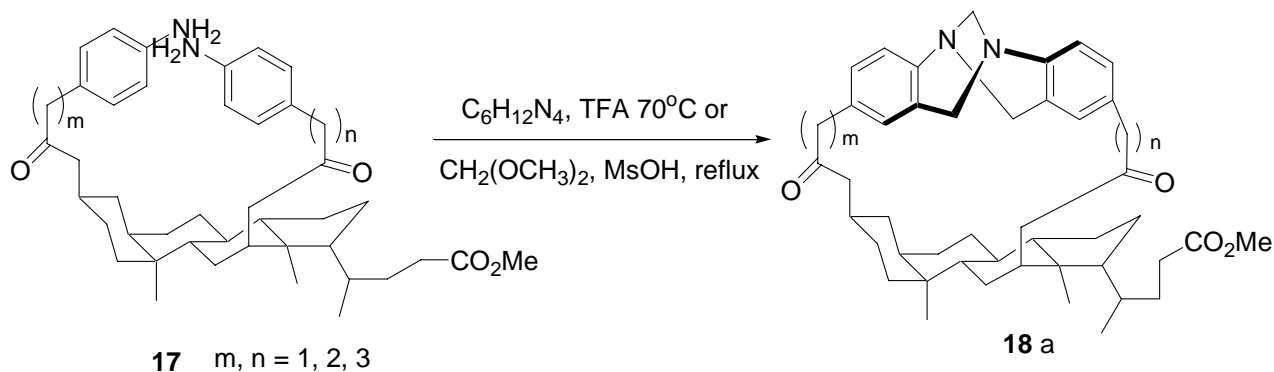
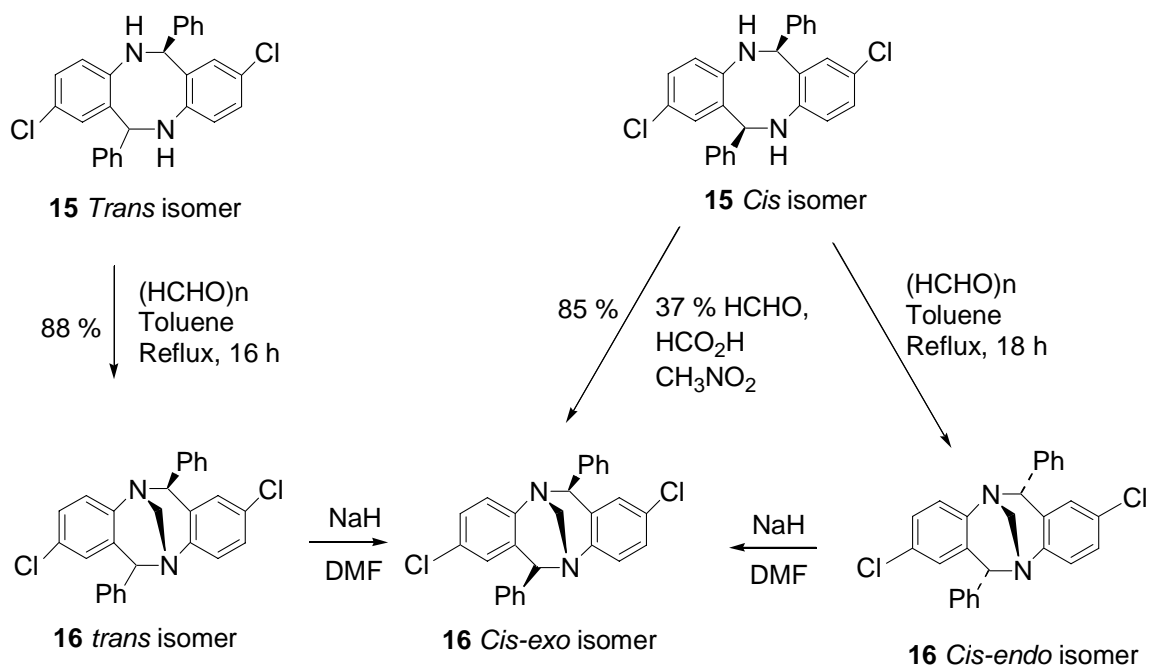
### 10.2.3. Tröger's base included in larger ring

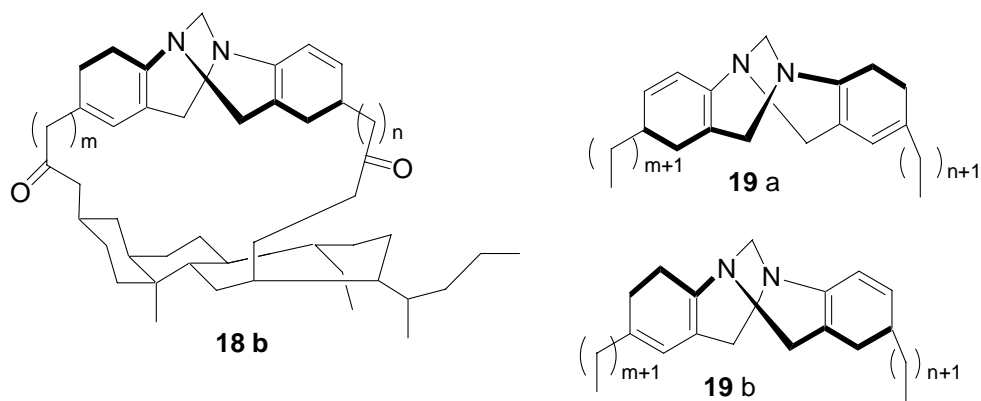




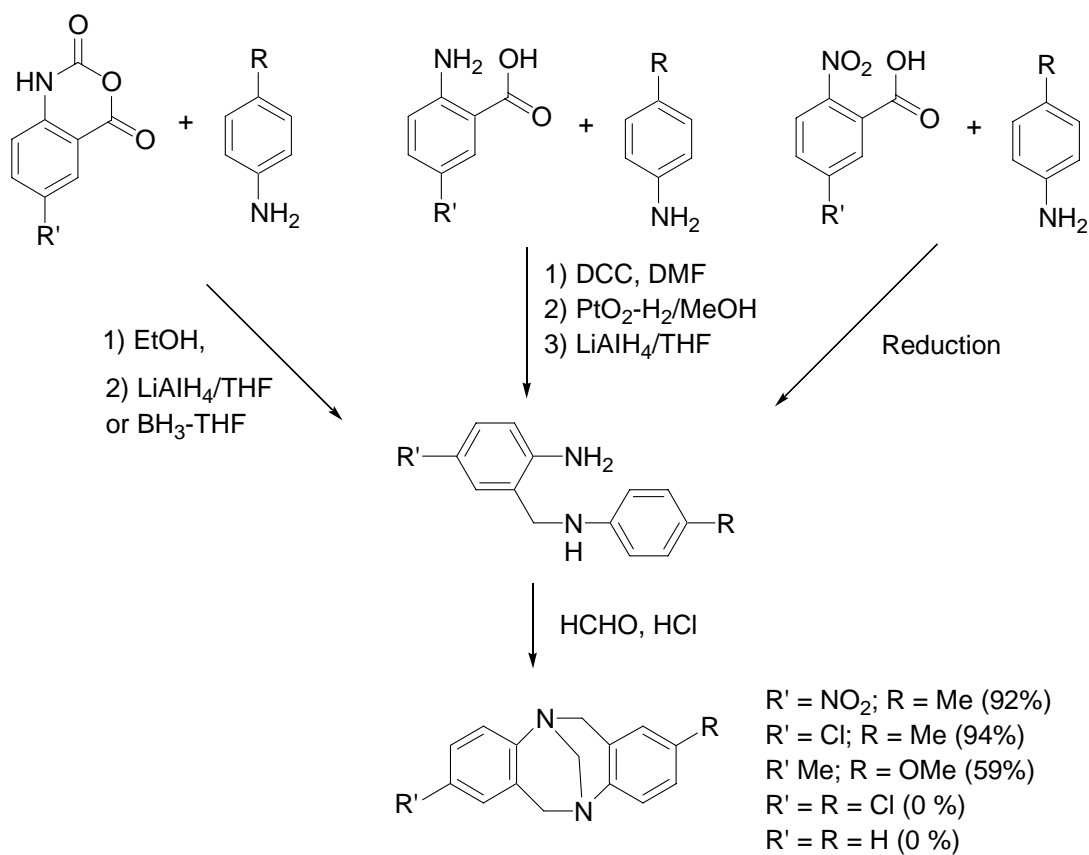


### 10.2.4. Asymmetric synthesis

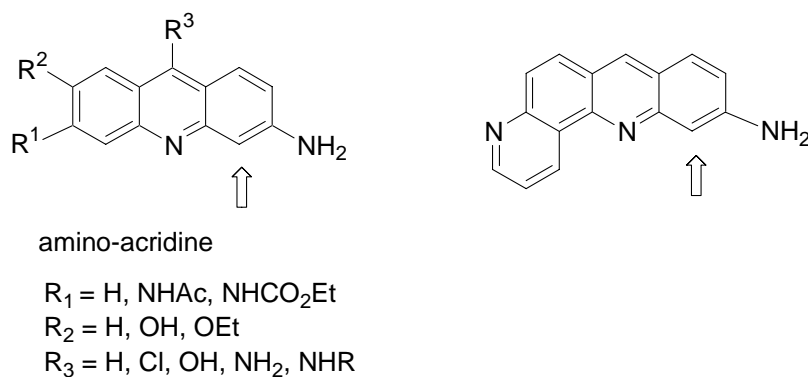


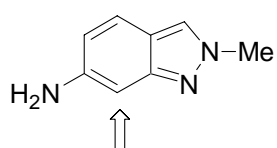
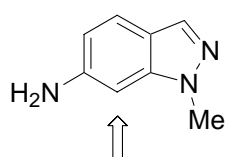
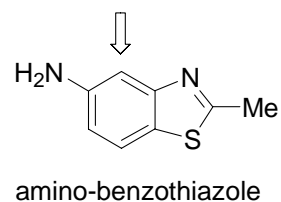
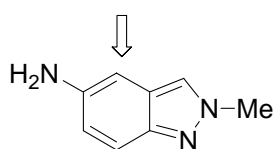
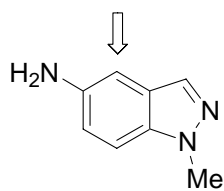
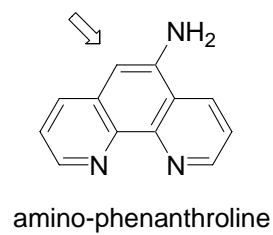
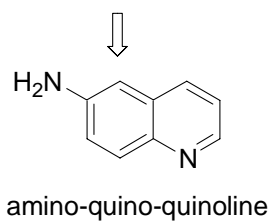
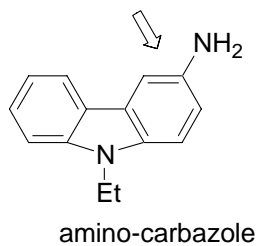


### 10.2.5. Unsymmetrical analogues

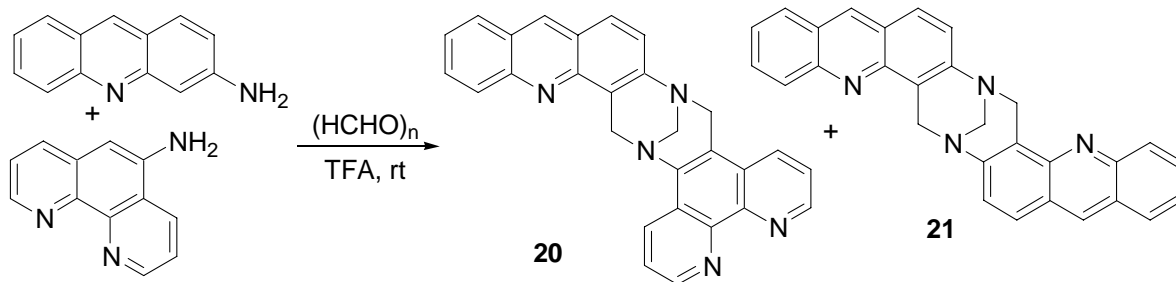
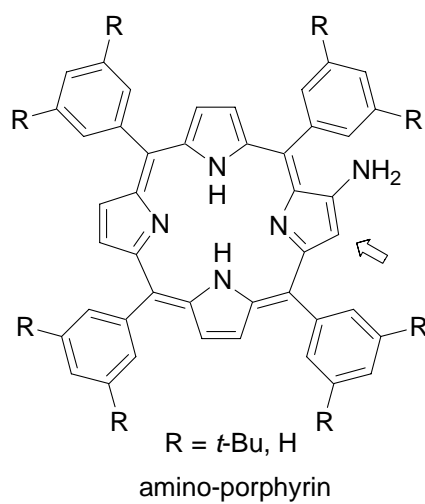
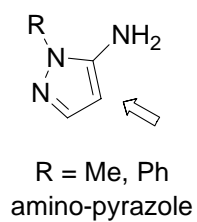


### 10.3. Synthesis of Heterocyclic Analogues



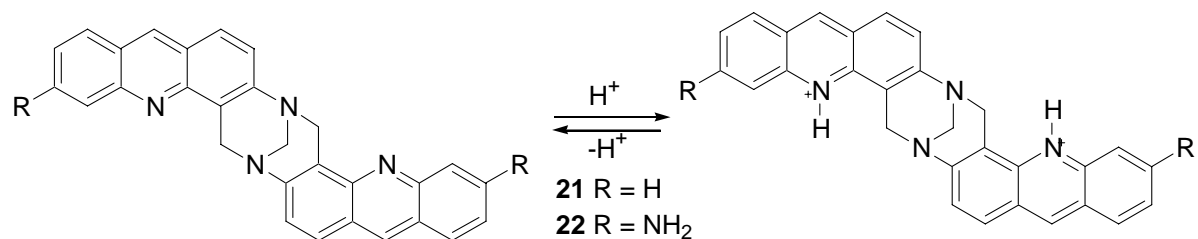


amino-indazole



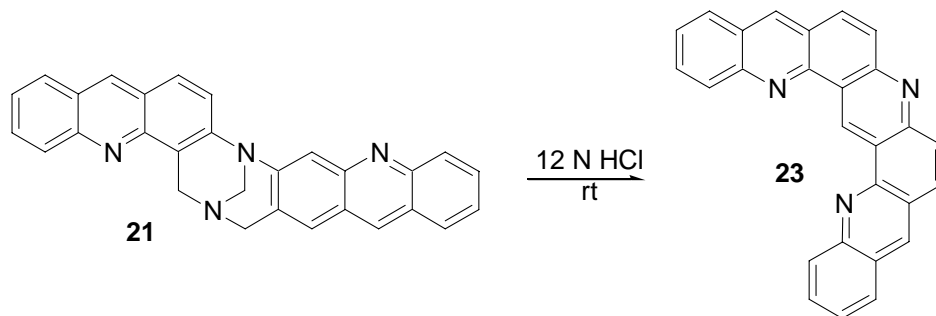
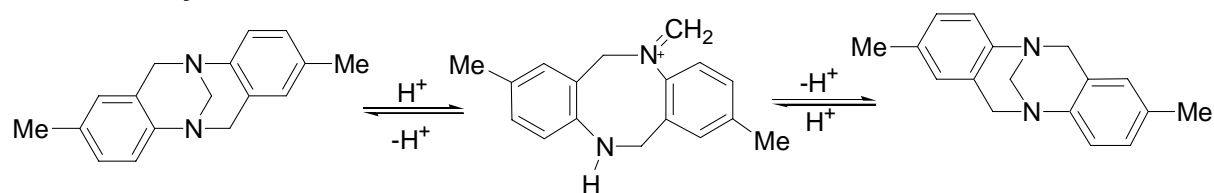
56 % (based on 5-aminophenanthroline)

## 10.4. Spectroscopic and Physical Properties

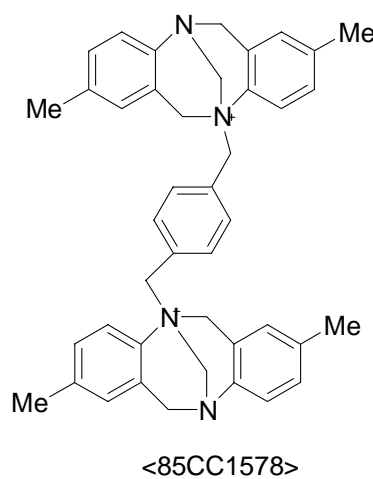
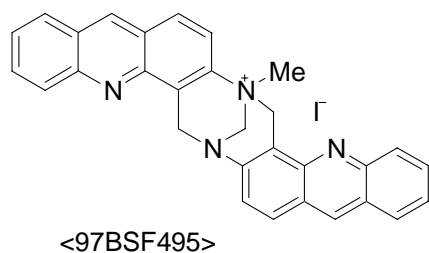
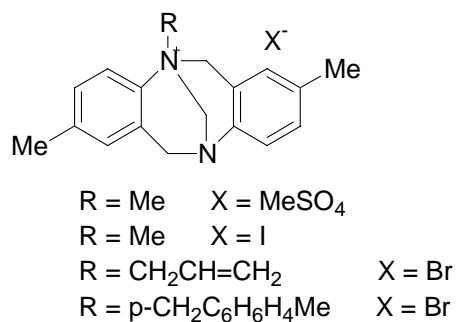


## 10.5. Chemical Reactivity

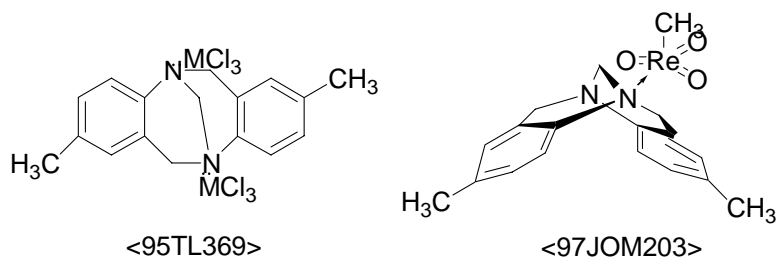
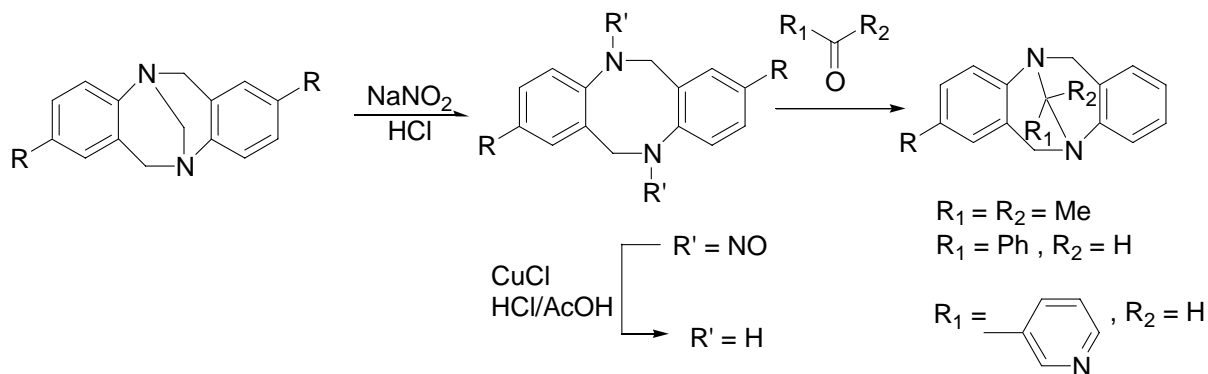
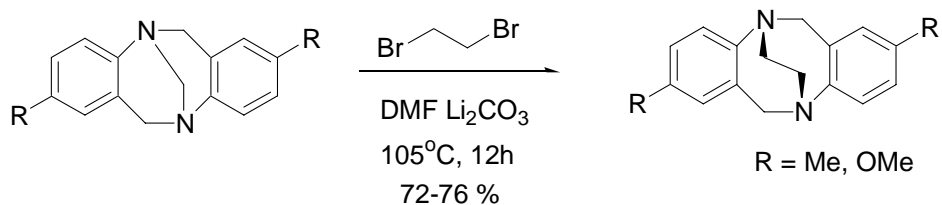
### 10.5.1. Stability in acidic media. Racemization



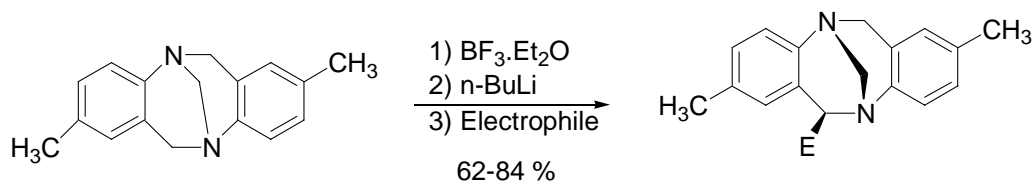
### 10.5.2. Reactivity of the diazocine unit



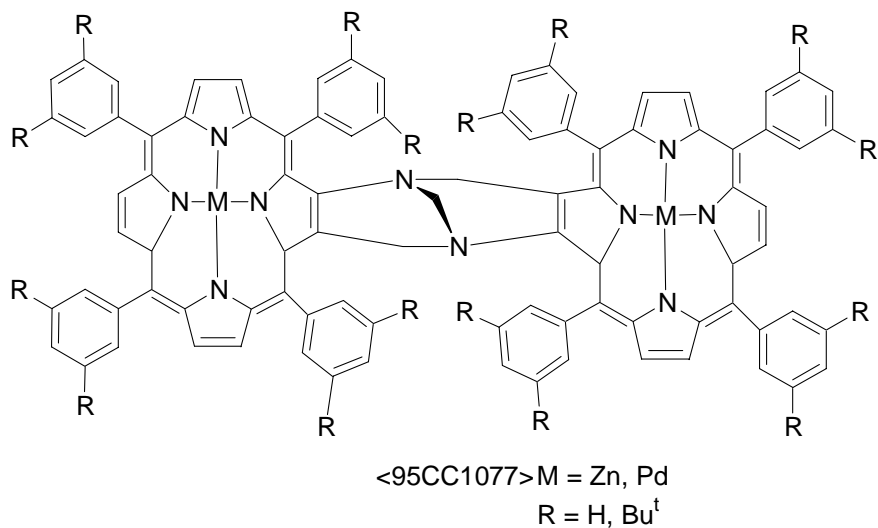


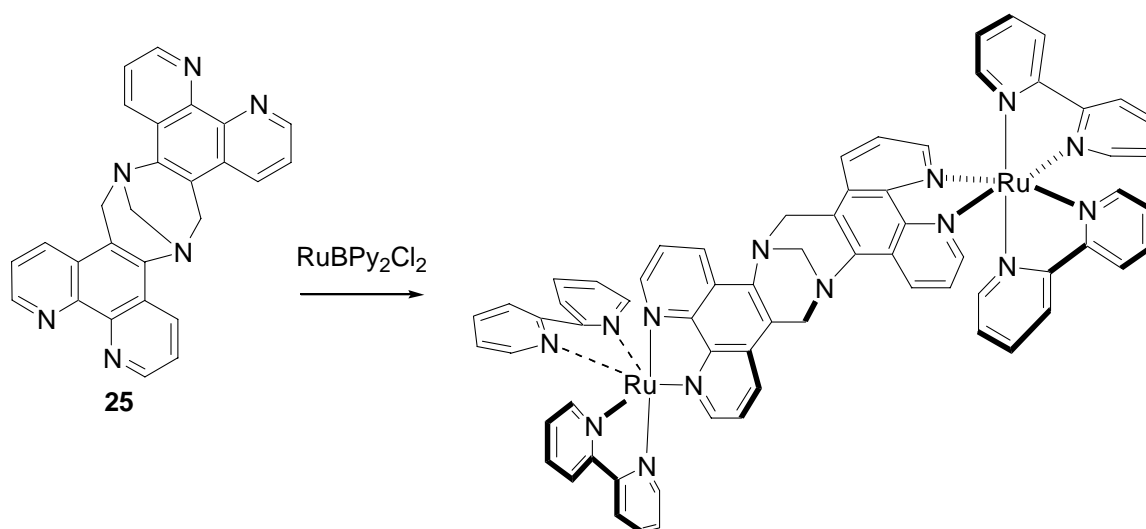
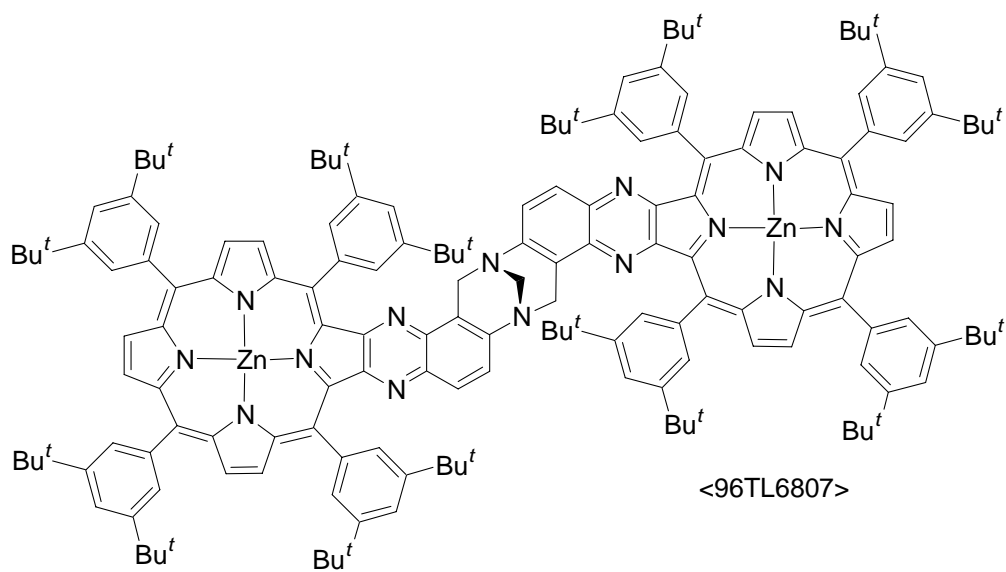
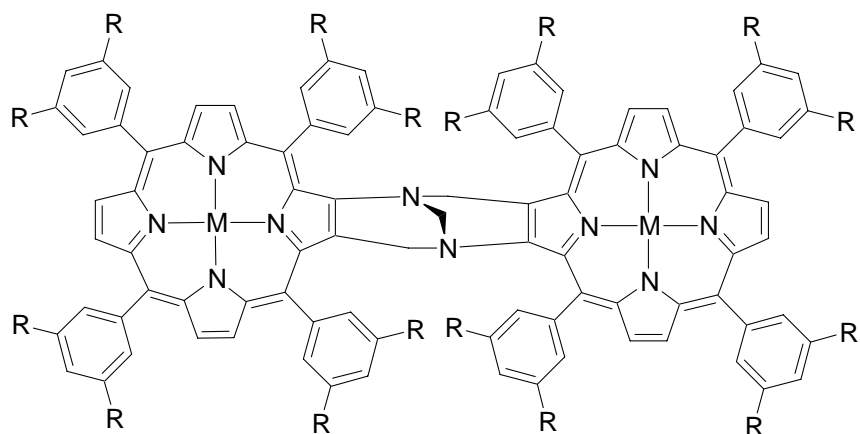


### 10.5.3. Metallation



### 10.5.4. Complexation of the constituent heterocycles





## 10.6. Applications of Tröger's Base and Its Analogues

