

## GENERAL REMARKS

1. The structures are indicated by a double number, the first part of which indicates the chart number in which it occurs and the second part indicates the serial number of the structure, e.g. (1.3) means, structure 3 in Chart 1.
2. The spectra concerning the chapter are given just after the experimental part.
3. The  $^1\text{H}$  NMR and  $^{13}\text{C}$ NMR spectra were recorded in  $\text{CDCl}_3$  /  $\text{DMSO-d}_6$  (unless otherwise stated) with TMS as an internal reference, with Bruker AC-200 or MSL-300 (200 MHz or 300 MHz for  $^1\text{H}$ NMR and 50 MHz or 75 MHz for  $^{13}\text{C}$  NMR spectrometer.) The chemical shifts are expressed in  $\delta$  units.
4. The IR spectra were recorded in  $\text{CHCl}_3$ , nujol or as a KBr pellet on Perkin-Elmer-783 spectrophotometer and the values are expressed in  $\text{cm}^{-1}$ .
5. The melting points (m.p.) are uncorrected.
6. The ether extracts were dried with anhydrous sodium sulphate, unless otherwise mentioned.
7. The abbreviations used in the literature and charts are given below.

## ABBREVIATIONS:

cat	Catalyst
EWG	Electron withdrawing group
EtOH	Ethanol
Fig.	Figure
FAP	Fluorapatite
g	Grams
hr	Hour
LSB	$\text{LaNa}_3$ Tri(binaphthoxide)

min	Minutes
mol	Mole
mmol	Mili mole
M.P.	Melting point
obs	Observed
Pet-ether	Petroleum ether
r.t.	Room temperature
SSA	Silica sulfuric acid
TLC	Thin layer chromatography
TMS	Tetramethyl silane
TBABB	Tetra-n-butyl ammonium bibenzoate