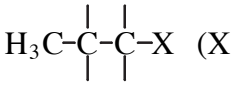
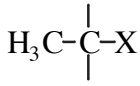
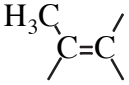
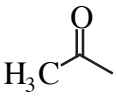
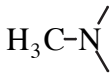
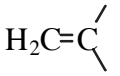
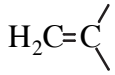
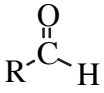
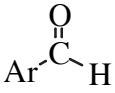
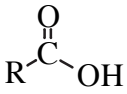
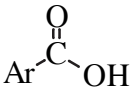
APPENDIX XII: SELECTED ^{1}H NMR CORRELATIONS

structural type	chemical shift range (ppm)
cyclopropyl	0.0–0.9
RNH_2 R_2NH	0.5–5.0 [a]
$-CH_3$ (saturated)	0.7–1.3
 (X = halogen, O, N, carbonyl)	0.9–1.2
 (saturated)	1.2–1.3
 (saturated)	1.4–1.6
 (X = halogen, O, N, carbonyl)	1.0–2.0
ROH	1.0–5.0 [a]
	1.6–1.9
$H_3C-C\equiv C-$	1.8–2.2
	1.9–2.6
H_3C-Ar (Ar = aromatic ring)	2.1–2.6
	2.1–3.0
$-C\equiv C-H$ (nonconjugated)	2.0–2.6
$-C\equiv C-H$ (conjugated)	2.8–3.1
H_3C-X (X = halogen, O)	2.6–4.4

structural type	chemical shift range (ppm)
Ar-NH_2 Ar_2NH	3.0–5.0 [a]
ArOH	4.0–10.0 [a]
 (nonconjugated)	4.6–5.0
 (nonconjugated)	5.1–5.9
 (conjugated)	5.3–6.3
 (conjugated)	5.3–7.7
ArH	6.0–9.5
 	9.5–10.5
 	9.7–13.2

[a] Highly dependent upon concentration and solvent effects.