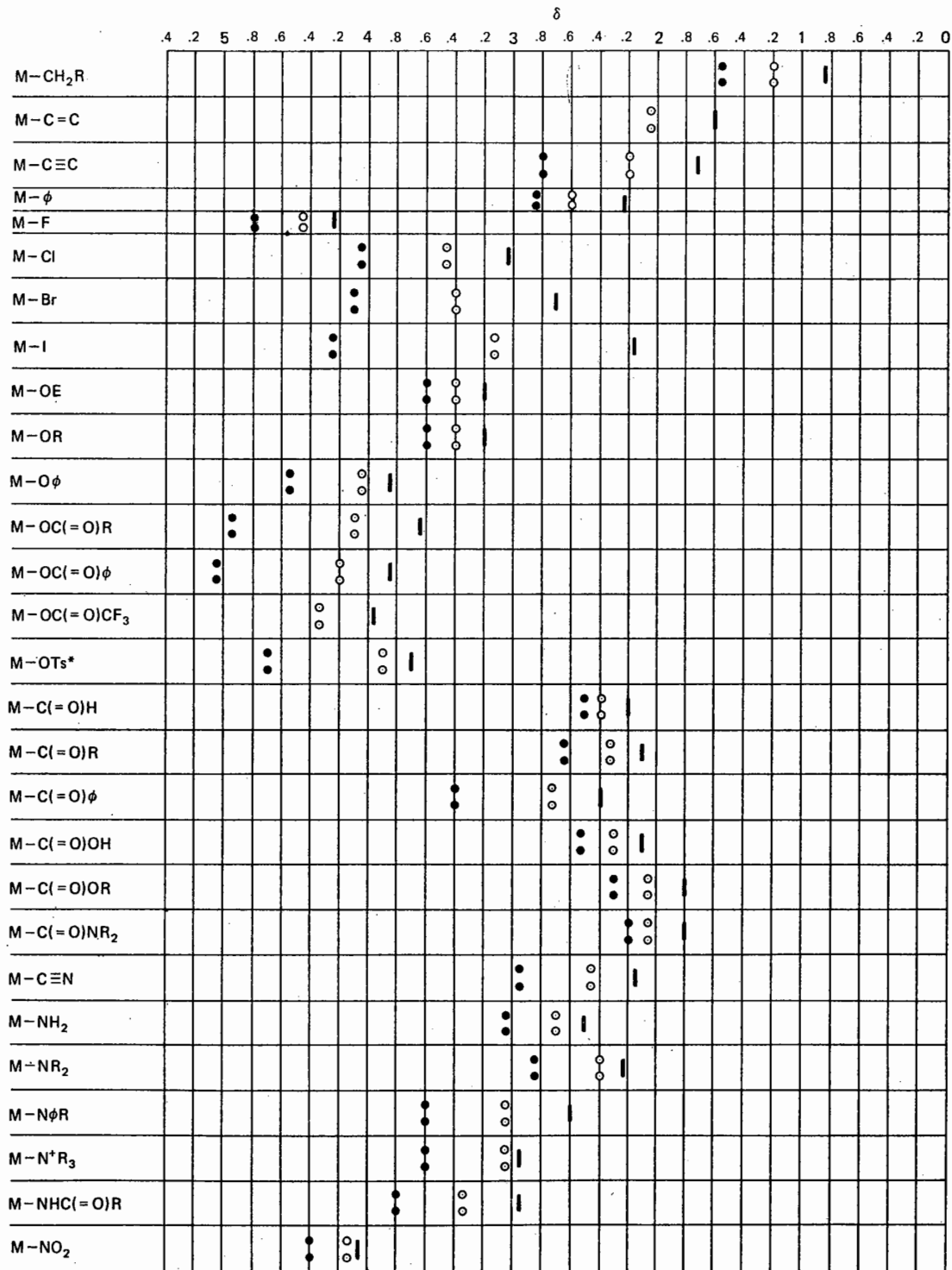


# CHART 1. CHEMICAL SHIFTS OF PROTONS ON A CARBON ATOM ADJACENT ( $\alpha$ - POSITION) TO A FUNCTIONAL GROUP IN ALIPHATIC COMPOUNDS (M-Y).

- ◻ M = methyl
- M = methylene
- M = methine



	4	.2	5	.8	.6	.4	.2	4	.8	.6	.4	.2	3	.8	.6	.4	.2	2	.8	.6	.4	.2	1	.8	.6	.4	.2	0
M-N=C			•	•									○	○														
M-N=C=O													○	○														
M-O-C≡N				○	○																							
M-N=C=S								•	•	○	○																	
M-S-C≡N													•	•	○	○												
M-O-N=O			○	○																								
M-SH													•	•	○	○												
M-SR													•	•	○	○												
M-Sφ																												
M-SSR																												
M-SOR													○	○														
M-SO <sub>2</sub> R													○	○														
M-SO <sub>3</sub> R																												
M-PR <sub>2</sub>																												
M-P <sup>+</sup> Cl <sub>3</sub>													○	○														
M-P(=O)R <sub>2</sub>																												
M-P(=S)R <sub>2</sub>																												

