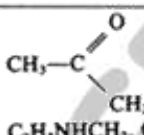
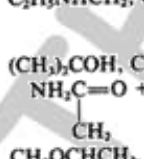
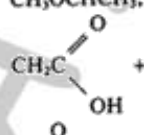
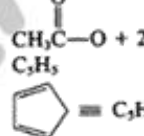
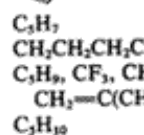
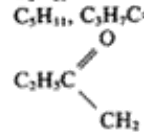
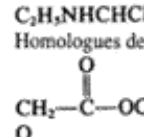
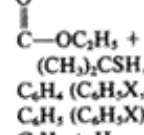
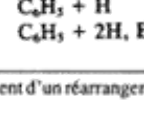
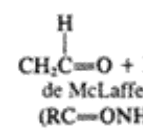
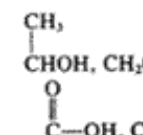


TABLE DES IONS LES PLUS COURANTS

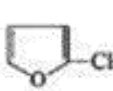
Extrait du livre de Silverstein Basler Morill, Identification spectrométrique de composés organiques, 5^{ème} ed., DeBoeck Université, Paris Bruxelles, 1998.

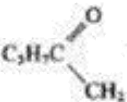
Tous les fragments repris ci-dessous portent une charge unitaire (+1). Ils sont à utiliser avec l'appendice C. Tous les membres des séries homologues et les isomères ne sont pas mentionnés. Cette liste est plus suggestive qu'exhaustive. L'appendice II de Hamming et Foster, la table A-7 du

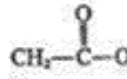
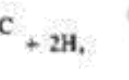
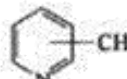
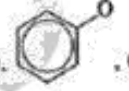
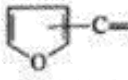
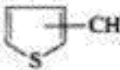
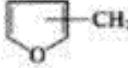
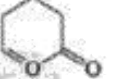
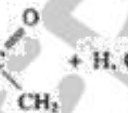
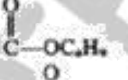
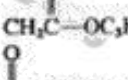
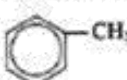
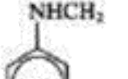
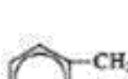
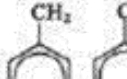
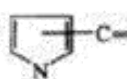
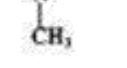
livre d'interprétation de McLafferty ainsi que ses données de haute résolution sont recommandés comme complément. Les déductions structurales sont reprises entre parenthèses.

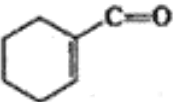
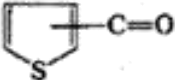
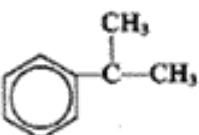
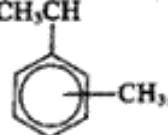
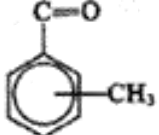
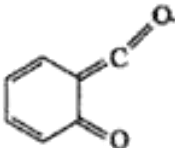
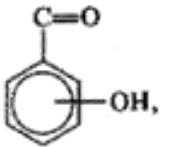
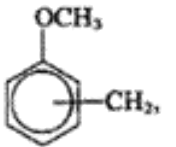
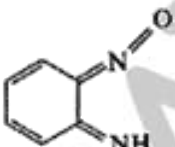
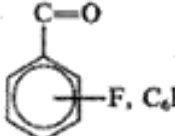
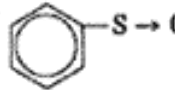
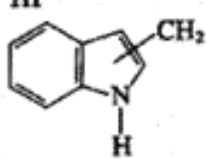
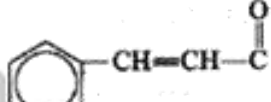
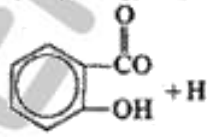
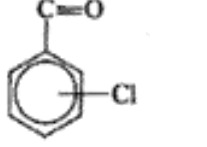
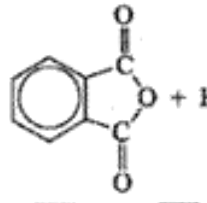
Ions m/z^a	(Structure imputée)	Ions m/z^a	(Structure imputée)
14	CH ₂	58	 + H, C ₂ H ₅ CHNH ₂ , (CH ₃) ₂ NCH ₂ ,
15	CH ₃		C ₂ H ₅ NHCH ₂ , C ₂ H ₅ S
16	O	59	 + H, (CH ₃) ₂ COH, CH ₂ OC ₂ H ₅ , C—OCH ₃ (RCO ₂ CH ₃),
17	OH		NH ₂ C=O + H,
18	H ₂ O, NH ₄		 CH ₃ OCHCH ₃ , CH ₃ CHCH ₂ OH, C ₂ H ₅ CHOH
19	F, H ₂ O	60	 + H, CH ₃ ONO
26	C≡N, C ₂ H ₂	61	 CH ₃ C—O + 2H, CH ₂ CH ₂ SH, CH ₂ SCH ₃ ,
27	C ₂ H ₃	65	C ₃ H ₅
28	C ₂ H ₄ , CO, N ₂ (air), CH=NH	66	 = C ₅ H ₆ , H ₂ S ₂ (RSSR)
29	C ₂ H ₃ , CHO	67	C ₃ H ₇
30	CH ₂ NH ₂ (RCH ₂ NH ₂), NO	68	CH ₂ CH ₂ CH ₂ C≡N
31	CH ₂ OH (RCH ₂ OH), OCH ₃	69	C ₃ H ₉ , CF ₃ , CH ₂ CH=CHC=O,
32	O ₂ (air)		CH ₂ =C(CH ₃)C=O
33	SH, CH ₃ F	70	C ₃ H ₁₀
34	H ₂ S	71	C ₃ H ₁₁ , C ₃ H ₇ C=O
35	Cl (³⁵ Cl à 37)	72	 + H, C ₂ H ₅ CHNH ₂ , (CH ₃) ₂ N=C=O,
36	HCl (H ³⁵ Cl à 38)		C ₂ H ₅ NHCHCH ₃ et isomères
39	C ₃ H ₃	73	Homologues de 59, (CH ₃) ₂ Si
40	CH ₂ C≡N, Ar(air)	74	 CH ₂ —C—OCH ₃ + H
41	C ₃ H ₃ , CH ₂ C≡N + H, C ₂ H ₂ NH	75	 C—OC ₂ H ₅ + 2H, C ₂ H ₅ CO + 2H, CH ₂ SC ₂ H ₅ ,
42	C ₃ H ₄ , C ₂ H ₃ O		(CH ₃) ₂ CSH, (CH ₃ O) ₂ CH, (CH ₃) ₂ SiOH
43	C ₃ H ₇ , CH ₂ C=O, CH ₂ C=OG, G = R, Ar, NH ₂ , OR, OH, C ₂ H ₅ N	76	C ₆ H ₄ (C ₆ H ₅ X, C ₆ H ₄ XY)
44	 CH ₂ C=O + H (Aldéhydes, réarrangement de McLafferty), CH ₃ CHNH ₂ , CO ₂ , NH ₂ C=O (RC=ONH ₂), (CH ₃) ₂ N	77	C ₆ H ₅ (C ₆ H ₅ X)
45	 CHOH, CH ₂ CH ₂ OH, CH ₂ OCH ₃ (RCH ₂ OCH ₃), C—OH, CH ₃ CH—O + H (CH ₃ CHOHR)	78	C ₆ H ₅ + H
46	NO ₂	79	C ₆ H ₅ + 2H, Br (⁸¹ Br à 81)
47	CH ₂ SH (RCH ₂ SH), CH ₃ S		
48	CH ₃ S + H		
49	CH ₂ Cl (CH ₂ ³⁵ Cl à 51)		
51	CHF ₂ , C ₄ H ₃		
53	C ₄ H ₃		
54	CH ₂ CH ₂ C≡N		
55	C ₄ H ₇ , CH ₂ =CHC=O		
56	C ₄ H ₆		
57	C ₄ H ₉ , C ₂ H ₅ C=O		

^a Les ions indiqués sous forme de fragment + nH (n = 1, 2, 3, ...) sont des ions qui proviennent d'un réarrangement impliquant un transfert d'hydrogène.

- 81 $\text{CH}_3\text{SS} + \text{H}, \text{HBr} (\text{H}^{81}\text{Br} \text{ à } 82)$
 $\text{CH}_2, \text{C}_6\text{H}_5, \text{C}_6\text{H}_9$
- 82 $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{C}\equiv\text{N}$
 $\text{CCl}_2 (\text{C}^{13}\text{Cl}^{35}\text{Cl} \text{ à } 84, \text{C}^{13}\text{Cl}_2 \text{ à } 86), \text{C}_6\text{H}_{10}$
- 83 $\text{C}_6\text{H}_{11}, \text{CHCl}_2 (\text{CH}^{13}\text{Cl}^{35}\text{Cl} \text{ à } 85, \text{CH}^{13}\text{Cl}_2 \text{ à } 87),$

- 85 $\text{C}_6\text{H}_{13}, \text{C}_4\text{H}_9\text{C}=\text{O},$
 $\text{CClF}_2 (\text{C}^{17}\text{ClF}_2 \text{ à } 87),$
 
- 86 $\text{C}_3\text{H}_7\text{C}=\text{O} + \text{H}, \text{C}_4\text{H}_9\text{CHNH}_2 \text{ et isomères}$

- 87 $\text{C}_3\text{H}_7\text{CO}, \text{homologues de 73}, \text{CH}_3\text{CH}_2\text{COCH}_3$

- 88 $\text{CH}_2-\text{C}=\text{O}-\text{OC}_2\text{H}_5 + \text{H}$

- 89 $\text{C}=\text{O}-\text{OC}_2\text{H}_5 + 2\text{H},$ 
- 90 $\text{CH}_3\text{CHONO}_2,$ 
- 91  $\text{CH}_2 (\text{C}_6\text{H}_7\text{CH}_2\text{Br}),$  CH
 $+ \text{H},$  $\text{C} + 2\text{H},$
- $(\text{CH}_3)_4\text{Cl} [(\text{CH}_3)_4^{13}\text{Cl} \text{ à } 93]$ 
- 92  $\text{CH}_2,$  $\text{CH}_2 + \text{H},$
- 93 $\text{CH}_2\text{Br} (\text{CH}_2^{81}\text{Br} \text{ à } 95, \text{RCH}_2\text{Br}), \text{C}_7\text{H}_9,$
 $\text{C}=\text{O},$  $\text{O}, \text{C}_7\text{H}_8 (\text{terpènes})$
- 95  $\text{C}=\text{O}$
- 96 $\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{C}\equiv\text{N}$
- 97 $\text{C}_7\text{H}_{13},$  CH_2
- 98  $\text{CH}_2\text{O} + \text{H}$
- 99 $\text{C}_7\text{H}_{13}, \text{C}_6\text{H}_{11}\text{O},$ 
- 100 $\text{C}_4\text{H}_9\text{C}=\text{O} + \text{H}, \text{C}_4\text{H}_9\text{CHNH}_2$

- 101 
- 102 $\text{CH}_2\text{C}=\text{O}-\text{OC}_2\text{H}_5 + \text{H}$

- 103 $\text{C}=\text{O}-\text{OC}_2\text{H}_5 + 2\text{H}, \text{C}_7\text{H}_{11}\text{S}, \text{CH}(\text{OCH}_2\text{CH}_3)_2$
- 104 $\text{C}_3\text{H}_7\text{CHONO}_2$
- 105  $\text{C}=\text{O},$
 $[\text{C}_6\text{H}_5(\text{C}=\text{O})\text{G}, \text{G} = \text{OH}, \text{OR}, \text{OAr}, \text{halogène}, \text{NH}_2]$
 $\text{CH}_2\text{CH}_2,$  CHCH
- 106  NHCH_2
- 107  $\text{CH}_2\text{O},$  $\text{CH}_2,$  OH
 $\text{C}_7\text{H}_4\text{Br} (\text{C}_7\text{H}_4^{81}\text{Br} \text{ à } 109)$
- 108  $\text{CH}_2\text{O} + \text{H},$  $\text{C}=\text{O}$


- 109 
- 111 
- 119 CF_3CF_2 ,   
- 120 
- 121   
- C_9H_{13} (terpenes)
- 122 $\text{C}_6\text{H}_5\text{C}(=\text{O})\text{O} + \text{H}, (\text{C}_6\text{H}_5\text{CO}_2\text{R})$
- 123  $\text{C}_6\text{H}_5\text{C}(=\text{O})\text{O} + 2\text{H},$
- 125  $\text{S} \rightarrow \text{O}$
- 127 I
- 128 HI
- 130 
- 131 C_3F_3 , 
- 135 $(\text{CH}_2)_4\text{Br}$ [$(\text{CH}_2)_4^{\text{H}}$ Br at 137]
- 138  $+ \text{H}$
- 139 
- 141 CH_3I (RCH_3I)
- 147 $(\text{CH}_3)_2\text{Si}=\text{O}-\text{Si}(\text{CH}_3)_3$
- 149  $+ \text{H}$
- 154 