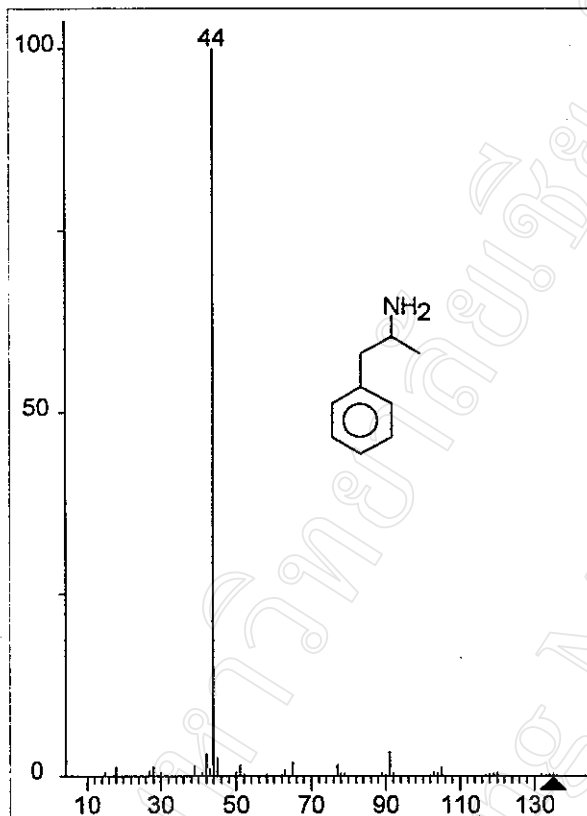
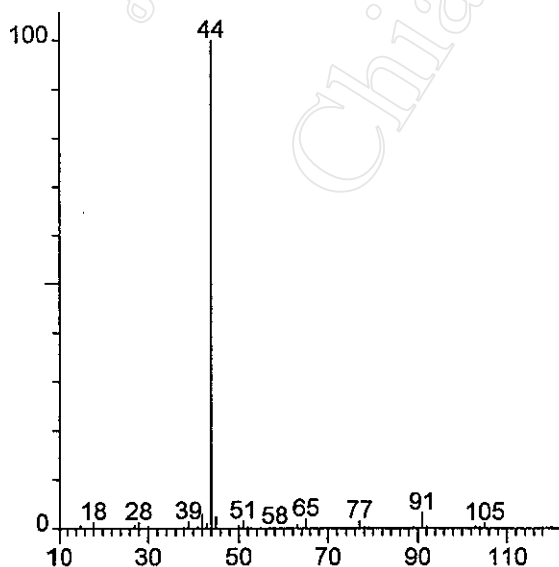


APPENDIX

A. Mass spectra of underivatized drugs in the NIST Library



(M) Amphetamine



Amphetamine

Formula: C₉H₁₃N

MW: 135 CAS#: 300-62-9 NIST#: 235438

ID#: 11052 DB: mainlib

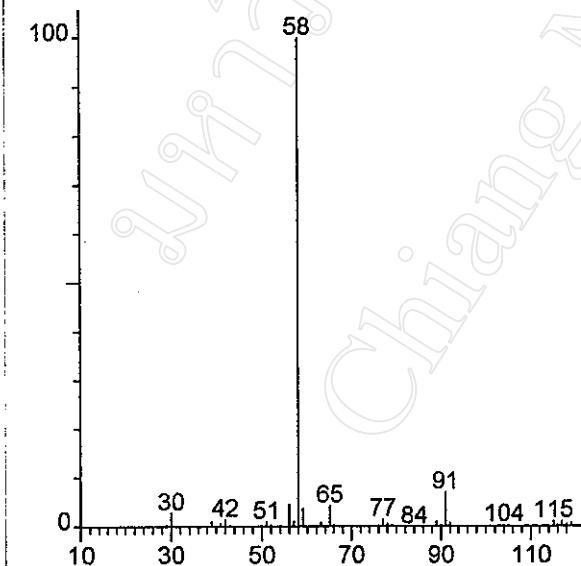
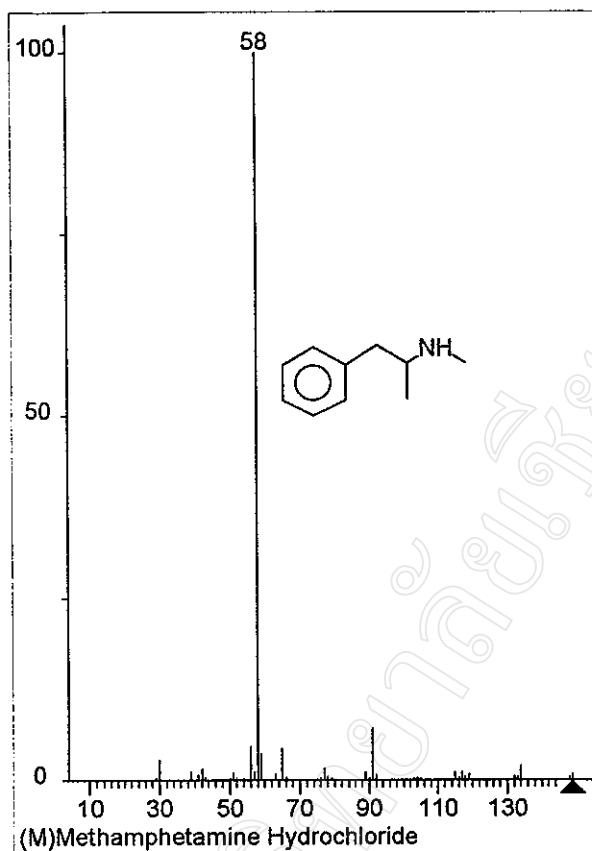
Other DBs: TSCA, RTECS, EPA, HODOC, EINECS,
Contributor: Japan AIST/NIMC Database- Spectrum

54 Masses and Abundances

15	7	45	26	74	2	105	13
18	14	50	7	75	2	106	1
26	1	51	16	76	2	117	2
27	8	52	4	77	16	118	4
28	14	53	2	78	6	119	5
29	2	56	2	79	5	120	6
30	6	57	1	89	5	130	1
38	3	58	4	90	3	132	4
39	15	61	1	91	34	133	2
40	2	62	3	92	6	134	4
41	6	63	9	93	1	135	5
42	31	64	2	102	2	136	2
43	11	65	20	103	7		
44	999	66	1	104	6		

Synonyms:

1. Benzeneethanamine, .alpha.-methyl-, (.+.)-
2. Phenethylamine, .alpha.-methyl-, (.+.)-
3. .beta.-Aminopropylbenzene
4. (.+.)-.alpha.-Methylphenethylamine
5. (.+.)-.alpha.-Methylphenylethylamine
6. (.+.)-.beta.-Phenylisopropylamine
7. (.+.)-.Desoxynorephedrine
8. DL-.alpha.-Methylphenethylamine
9. Actedron
10. Adipan
11. Allodene
12. Anorexine
13. Benzobar
14. Benzadrine
15. Benzolone
16. Elastonon
17. Fenamin
18. Finam
19. Isoamylne
20. Isomyn
21. Mecodrin
22. Norephedrine
23. Novydrine
24. Oktedrin
25. Ortedrine
26. Percomon
27. Phenamine
28. Phenedrine



Methamphetamine Hydrochloride

Formula: C₁₀H₁₅N

MW: 149 CAS#: 537-46-2 NIST#: 245957

ID#: 18797 DB: mainlib

Other DBs: RTECS, USP, HODOC, NIH, EINECS, I

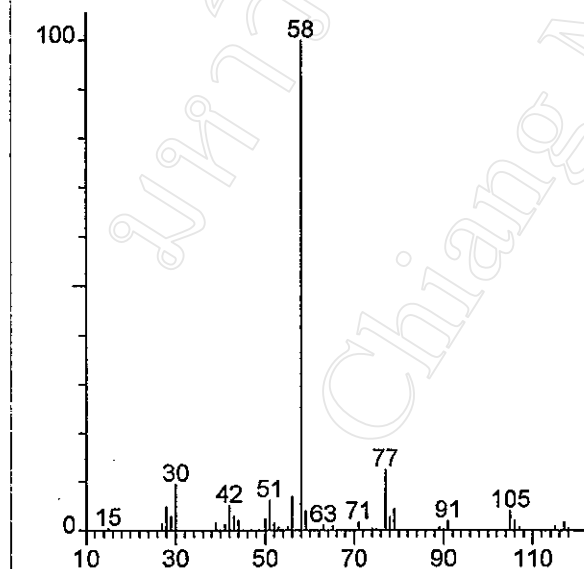
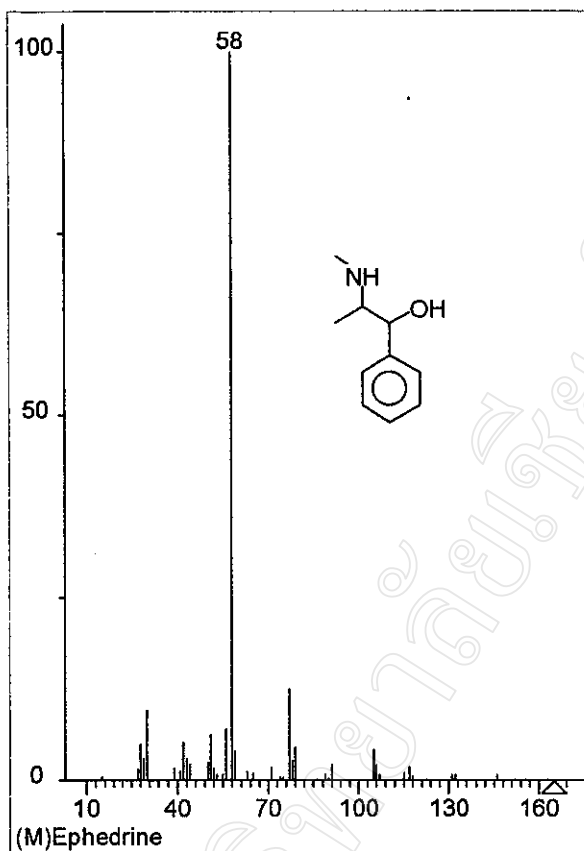
Contributor: AAFS Toxicology Section MS DB Comm

69 Masses and Abundances

29	4	58	999	82	1	117	13
30	29	59	37	84	1	118	6
31	1	62	2	87	1	119	9
32	1	63	10	89	12	120	1
38	1	64	1	90	4	121	1
39	13	65	44	91	72	125	1
41	8	66	5	92	8	130	2
42	17	68	1	93	1	131	1
43	5	70	1	95	1	132	7
44	1	71	1	102	1	133	6
50	4	74	1	103	4	134	21
51	11	75	2	104	5	135	2
52	4	76	4	105	4	146	1
53	1	77	17	106	1	148	6
54	3	78	7	111	1	149	9
55	1	79	4	113	2		
56	47	80	1	115	12		
57	13	81	1	116	5		

Synonyms:

1. Benzeneethanamine, N, alpha.-dimethyl-, (S)-
2. Phenethylamine, N, alpha.-dimethyl-, (S)-(+)-
3. (+)-(S)-Deoxyephedrine
4. (+)-Methamphetamine
5. (+)-Methylamphetamine
6. (+)-N-Methylamphetamine
7. D-(S)-methamphetamine
8. D-deoxyephedrine
9. D-desoxyephedrine
10. D-methamphetamine
11. D-methylamphetamine
12. D-N-methylamphetamine
13. D-N, alpha.-dimethylphenethylamine
14. D-phenylisopropylmethylamine
15. Benzeneethanamine, N, alpha.-dimethyl-, (+)-
16. L-Methamphetamine
17. Metamphetamine
18. Methamphetamine
19. Methyl-.beta.-phenylisopropylamine
20. Methylamphetamine
21. N-Methylamphetamine
22. Norodin
23. 1-Phenyl-2-methylaminopropane
24. D-1-Phenyl-2-methylaminopropan



Ephedrine

Formula: $C_{10}H_{15}NO$

MW: 165 CAS#: 299-42-3 NIST#: 113823

ID#: 18726 DB: mainlib

Other DBs: Fine, TSCA, RTECS, USP, HODOC, NIH

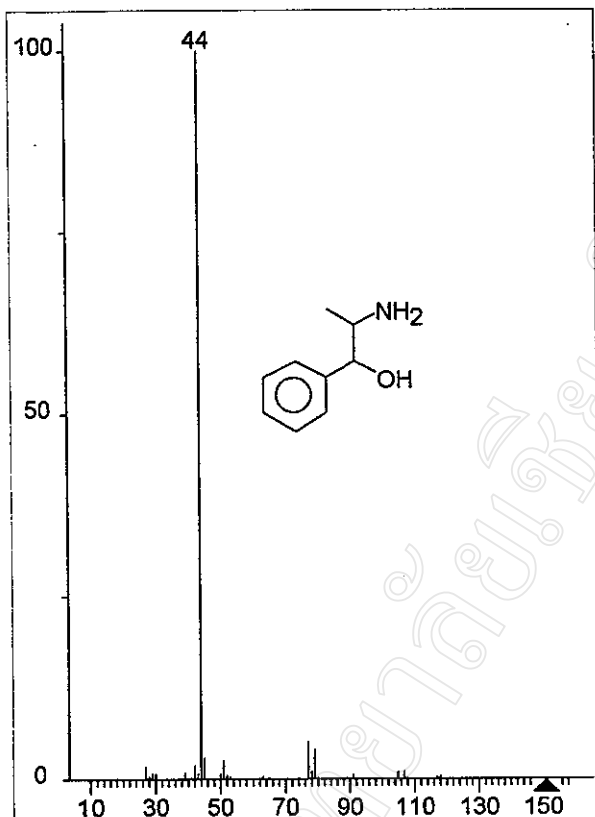
Contributor: NIST Mass Spectrometry Data Center, 1

38 Masses and Abundances

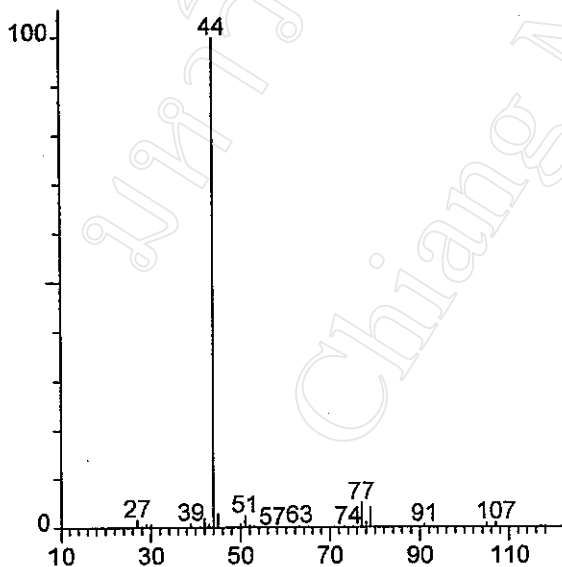
15	6	50	25	71	19	106	22
27	17	51	64	74	6	107	9
28	51	52	17	75	5	115	11
29	31	53	9	77	126	117	19
30	97	55	9	78	29	118	7
39	17	56	72	79	46	131	8
41	14	58	999	89	9	132	9
42	53	59	41	90	4	146	8
43	31	63	13	91	22		
44	23	65	11	105	43		

Synonyms:

1. (-)-Ephedrine
2. L-ephedrine
3. Efedrin
4. Ephedrin
5. Benzenemethanol, .alpha.-[1-(methylamino)ethyl]
6. .alpha.-Hydroxy-.beta.-methyl amine propylbenze
7. (-)-.alpha.-(1-Methylaminoethyl)benzyl alcohol
8. i-Sedrin
9. l-.alpha.-(1-Methylaminoethyl)benzyl alcohol
10. l-2-Methylamino-1-phenylpropanol
11. Ephedrine, l-(-)-
12. Ephedritol
13. Ephedrol
14. Ephedrosan
15. Ephedrotal
16. Ephedsol
17. Ephendronal
18. Ephoxamin
19. Fedrin
20. Isofedrol
21. Kratedyn
22. Lexofedrin
23. Manadrin
24. Mandrin
25. Nasol
26. Norephedrine, N-methyl-
27. Sanedrine
28. Vencipon
29. Zephrol
30. 1-Hydroxy-2-methylamino-1-phenylpropane
31. 1-Phenyl-2-methylaminopropanol
32. Biophedrin



(M) Benzenemethanol, .alpha.-(1-aminoethyl)-, (R*,S*)-



Benzenemethanol, .alpha.-(1-aminoethyl)-, (R*,S*)-
Formula: C₉H₁₃NO

MW: 151 CAS#: 14838-15-4 NIST#: 156577

ID#: 10969 DB: mainlib

Other DBs: Fine, TSCA, RTECS, NIH, EINECS

Contributor: Chemical Concepts

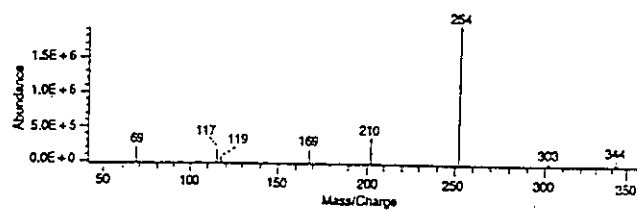
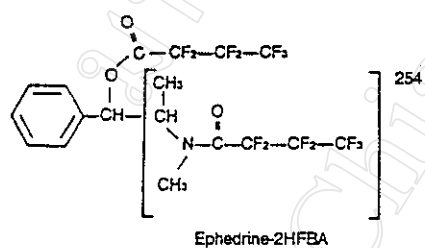
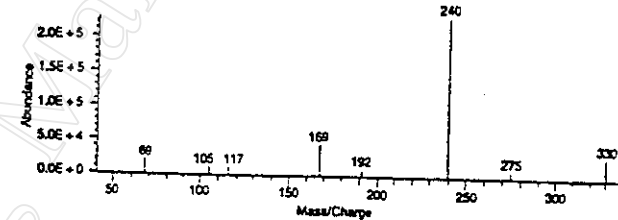
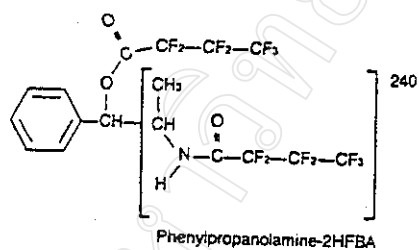
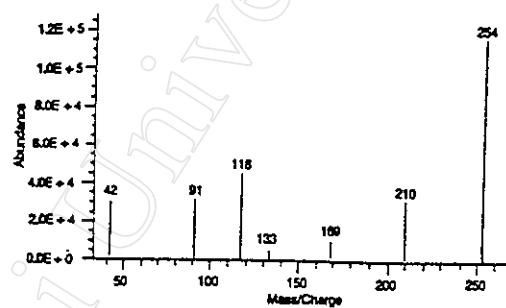
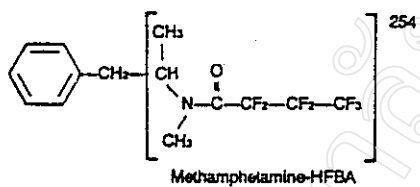
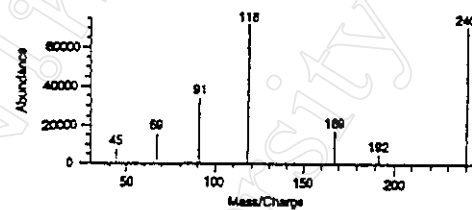
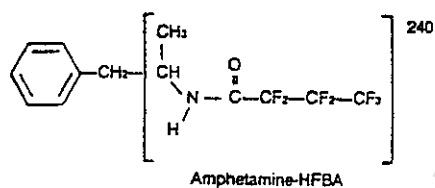
74 Masses and Abundances

26	1	52	7	75	1	108	2
27	18	53	5	76	1	115	1
28	5	54	Tr	77	52	116	Tr
29	8	55	1	78	12	117	4
30	8	56	Tr	79	42	118	5
31	1	57	Tr	80	3	119	1
37	Tr	58	Tr	86	Tr	120	Tr
38	2	59	Tr	88	Tr	130	Tr
39	10	61	Tr	89	3	131	Tr
40	2	62	2	90	2	132	1
41	3	63	5	91	7	133	1
42	20	64	1	92	Tr	134	1
43	9	65	3	93	Tr	135	Tr
44	999	66	Tr	102	Tr	136	Tr
45	30	67	Tr	103	1	151	Tr
46	Tr	68	Tr	104	Tr	152	1
49	Tr	72	Tr	105	10	153	Tr
50	8	73	Tr	106	2		
51	26	74	2	107	11		

Synonyms:

1. Norephedrine, (+-)-
2. (+-)-Norephedrine
3. (+-)-Phenylpropanolamine
4. Phenylpropanolamine
5. Propadrine
6. Phenylpropanolamine
7. 2-Amino-1-phenyl-1-propanol
8. Benzyl alcohol, .alpha.-(1-amino-ethyl)
9. DL-.alpha.-(1-aminoethyl)benzyl alcohol
10. DL-.alpha.-hydroxy-.beta.-aminopropylbenzene
11. DL-Norephedrine
12. DL-1-Phenyl-2-aminopropanol-1
13. DL-2-Amino-1-hydroxy-1-phenylpropane
14. Mucron
15. Norephedrine
16. Rhindecon
17. Benzenemethanol, .alpha.-(1-aminoethyl)-, (R*,S)
18. dl-Propadrine
19. Norephedrine, (+-)-
20. (+-)-Norephedrine
21. (+-)-Phenylpropanolamine
22. (+-)-Norephedrin
23. dl-Phenylpropanolamine

B. Mass spectra of HFBA derivatives in the literature [19]



VITA

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Academic Status

- High school certificate holder from Triamudomseuksa School, Bangkok, 1978
- B. Sc. (Chemistry) degree holder from Chiang Mai University, 1982
- B.B.A. (General Management) degree holder from Sukhothai Thammathirat Open University, 1990

Practical Experience

- Scientist, Chemistry Division, Science Service Department, 1988
- Medical Scientist, Toxicology Section, Regional Medical Science Center, Chiang Mai, 1989 - present
- Group training course in Air Pollution Source Monitoring at Kitakyushu International Center, Japan, September - December 1993 (organized by JICA under the International Cooperation Program of the Government of Japan)
- Attended a course on Atomic Absorption Spectroscopy at Varian Australia Pty Ltd., Australia, August 1995