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APPENDIX

RAW DATA FOR OPTIMIZATION OF HEADSPACE SPME PARAMETERS

1) For the fiber selection:

Compound	100 µm PDMS	65 µm PDMS-DVB	85 µm PA
Naphthalene	157,901	140,321	160,216
Acenaphthylene	126,852	138,198	168,940
Acenaphthene	448,802	458,523	463,824
Fluorene	792,594	898,870	1,015,167
Phenanthrene	423,089	281,806	498,763
Anthracene	287,915	364,927	445,268
Fluoranthene	176,661	342,733	480,669
Pyrene	430,245	681,934	667,985
Benzo(a)anthracene	30,630	45,463	40,882
Chrysene	40,230	47,817	49,543
Benzo(b)fluoranthene	3,994	1,713	2,575
Benzo(k)fluoranthene	3,902	2,051	1,550
Benzo(a)pyrene	7,614	2,422	4,143
Indeno(123-cd)pyrene	7,752	6,022	1,351
Dibenzo(ah)anthracene	2,758	1,063	1,372
Benzo(ghi)perylene	2,307	1,208	1,812

2) For the extraction temperature:

Compound	110 °C	130 °C	150 °C
Naphthalene	159,477	322,756	297,268
Acenaphthylene	264,354	278,295	263,376
Acenaphthene	548,708	735,077	846,833
Fluorene	647,075	698,606	913,535
Phenanthrene	509,201	580,337	867,684
Anthracene	350,143	519,672	824,215
Fluoranthene	282,932	344,508	665,658
Pyrene	136,992	308,392	592,738
Benzo(a)anthracene	122,766	63,988	162,989
Chrysene	36,496	41,679	120,462
Benzo(b)fluoranthene	21,254	15,829	52,008
Benzo(k)fluoranthene	13,759	12,602	54,665
Benzo(a)pyrene	75,638	20,178	38,063
Indeno(123-cd)pyrene	4,387	2,771	8,378
Dibenzo(ah)anthracene	5,859	6,612	12,210
Benzo(ghi)perylene	3,068	2,368	7,867

3) For the extraction time:

Compound	30 min	60 min	90 min
Naphthalene	632,141	456,821	521,620
Acenaphthylene	647,193	359,667	473,218
Acenaphthene	1,375,062	1,114,078	1,268,009
Fluorene	1,161,875	1,045,534	1,091,236
Phenanthrene	1,364,708	1,404,619	1,400,963
Anthracene	2,028,748	1,789,919	2,087,760
Fluoranthene	916,207	1,178,875	1,234,883
Pyrene	1,074,412	1,214,834	1,312,820
Benzo(a)anthracene	225,910	359,397	567,381
Chrysene	248,914	360,970	563,660
Benzo(b)fluoranthene	50,838	101,962	207,360
Benzo(k)fluoranthene	51,261	93,614	145,035
Benzo(a)pyrene	42,439	40,582	94,638
Indeno(123-cd)pyrene	11,171	14,160	30,770
Dibenzo(ah)anthracene	8,015	9,928	21,555
Benzo(ghi)perylene	13,654	12,835	28,661

4) For the addition of 5% (w/v) NaCl solution or distilled water:

Compound	Salt solution			Water		
	100 µl	250 µl	500 µl	100 µl	250 µl	500 µl
Naphthalene	280,278	595,539	200,595	476,025	502,126	611,821
Acenaphthylene	257,213	399,212	248,196	508,234	372,290	337,932
Acenaphthene	424,858	865,226	804,809	698,126	800,027	1,058,107
Fluorene	434,069	859,489	904,951	721,984	783,554	1,068,972
Phenanthrene	352,465	658,522	758,290	555,829	670,714	934,311
Anthracene	629,832	1,155,565	1,164,326	846,414	1,045,020	1,311,551
Fluoranthene	304,211	413,411	478,174	458,167	479,073	663,734
Pyrene	248,258	324,926	362,641	389,844	405,469	542,929
Benzo(a)anthracene	144,246	182,752	81,054	177,762	140,104	131,510
Chrysene	156,244	116,320	85,318	187,973	149,380	133,801
Benzo(b)fluoranthene	46,259	47,735	27,247	53,121	57,195	27,435
Benzo(k)fluoranthene	47,364	21,073	11,550	45,062	10,284	10,917
Benzo(a)pyrene	38,162	23,461	12,592	37,471	25,009	13,696
Indeno(123-cd)pyrene	12,652	7,896	3,622	8,334	6,041	5,552
Dibenzo(ah)anthracene	14,699	7,053	3,121	8,438	10,822	3,090
Benzo(ghi)perylene	9,688	4,680	1,480	7,834	3,078	2,107

RAW DATA FOR METHOD VALIDATION

1) For the calibration curve ($n=2$):

Compound	Unspiked			150 ng/g		
	1	2	Mean	1	2	Mean
Naphthalene	41,844	41,318	41,581	46,315	43,066	44,691
Acenaphthylene	17,024	14,337	15,681	22,751	20,781	21,766
Acenaphthene	5,671	10,746	8,209	24,913	18,374	21,643
Fluorene	32,555	19,430	25,993	37,070	39,492	38,281
Phenanthrene	49,663	46,289	47,976	58,904	44,305	51,605
Anthracene	40,344	42,004	41,174	53,063	57,599	55,331
Fluoranthene	2,316	1,955	2,136	7,941	7,058	7,499
Pyrene	43,954	58,218	51,086	64,009	62,952	63,480
Benzo(a)anthracene	0	0	0	2,956	3,376	3,166
Chrysene	7,256	8,568	7,912	9,330	14,132	11,731
Benzo(b)fluoranthene	5,465	5,891	5,678	5,040	7,464	6,252
Benzo(k)fluoranthene	784	640	712	1,112	1,740	1,426
Benzo(a)pyrene	224	312	268	450	639	544
Indeno(123-cd)pyrene	167	110	139	119	174	147
Dibenzo(ah)anthracene	138	82	110	82	159	120
Benzo(ghi)perylene	239	238	238	463	392	427

Compound	220 ng/g			500 ng/g		
	1	2	Mean	1	2	Mean
Naphthalene	52,771	41,521	47,146	60,063	43,943	52,003
Acenaphthylene	20,204	24,661	22,432	67,466	8,687	38,076
Acenaphthene	27,933	28,852	28,393	56,739	33,103	44,921
Fluorene	37,276	58,449	47,862	65,463	56,029	60,746
Phenanthrene	55,593	57,063	56,328	38,827	86,169	62,498
Anthracene	81,706	46,325	64,015	131,264	86,454	108,859
Fluoranthene	8,806	13,780	11,293	29,754	26,141	27,948
Pyrene	88,913	55,104	72,009	118,294	69,726	94,010
Benzo(a)anthracene	4,240	5,795	5,018	753	16,158	8,456
Chrysene	13,405	10,809	12,107	12,194	23,031	17,612
Benzo(b)fluoranthene	6,014	7,905	6,959	2,675	20,327	11,501
Benzo(k)fluoranthene	3,190	1,261	2,225	1,068	5,147	3,108
Benzo(a)pyrene	336	959	648	971	2,320	1,645
Indeno(123-cd)pyrene	224	215	220	605	680	643
Dibenzo(ah)anthracene	219	189	204	552	232	392
Benzo(ghi)perylene	701	654	678	646	751	699

For the calibration curve (linearity) (continue):

Compound	1000 ng/g			2000 ng/g		
	1	2	Mean	1	2	Mean
Naphthalene	80,484	58,264	69,374	103,508	103,278	103,393
Acenaphthylene	42,915	50,688	46,802	101,656	97,821	99,739
Acenaphthene	89,290	52,496	70,893	193,917	186,310	190,113
Fluorene	137,465	70,986	104,226	209,782	215,825	212,804
Phenanthrene	109,738	85,551	97,645	190,558	161,070	175,814
Anthracene	113,477	116,880	115,178	199,908	193,173	196,541
Fluoranthene	47,081	43,079	45,080	139,009	90,470	114,740
Pyrene	101,833	135,455	118,644	227,865	223,272	225,569
Benzo(a)anthracene	21,246	19,788	20,517	54,561	38,806	46,684
Chrysene	25,541	30,777	28,159	54,345	53,505	53,925
Benzo(b)fluoranthene	15,935	15,949	15,942	27,322	33,443	30,383
Benzo(k)fluoranthene	5,763	8,036	6,900	29,433	11,673	20,553
Benzo(a)pyrene	2,659	2,867	2,763	7,674	7,438	7,556
Indeno(123-cd)pyrene	548	1,406	977	3,306	2,430	2,868
Dibenzo(ah)anthracene	380	790	585	1,422	1,803	1,613
Benzo(ghi)perylene	1,644	966	1,305	5,377	3,193	4,285

Compound	2600 ng/g		
	1	2	Mean
Naphthalene	105,773	122,925	114,349
Acenaphthylene	83,618	173,776	128,697
Acenaphthene	203,566	229,817	216,691
Fluorene	215,778	280,799	248,289
Phenanthrene	183,716	200,071	191,894
Anthracene	208,981	309,562	259,271
Fluoranthene	133,237	114,984	124,110
Pyrene	312,100	217,425	264,762
Benzo(a)anthracene	59,757	57,548	58,653
Chrysene	64,722	65,586	65,154
Benzo(b)fluoranthene	33,617	29,857	31,737
Benzo(k)fluoranthene	31,206	21,919	26,563
Benzo(a)pyrene	6,797	12,161	9,479
Indeno(123-cd)pyrene	6,862	1,798	4,330
Dibenzo(ah)anthracene	2,113	1,513	1,813
Benzo(ghi)perylene	5,222	7,239	6,231

2) For the precision (R.S.D. %):

a) Spiked moss samples of 150 ng/g ($n=3$)

Compound	1	2	3	Mean	$(y_1 - x)^2$, a	$(y_2 - x)^2$, b	$(y_3 - x)^2$, c	$(a+b+c)/2$	$\sqrt{(a+b+c)/2}$	RSD % ($n=3$)
Naphthalene	46,315	43,066	47,174	45,518	634,147	6,012,304	2,741,232	4,693,841	2,167	5
Acenaphthylene	22,751	20,781	17,687	20,406	5,498,504	140,042	7,393,565	6,516,056	2,553	13
Acenaphthene	24,913	18,374	21,872	21,720	10,195,959	11,192,742	23,239	10,705,970	3,272	15
Fluorene	37,070	39,492	44,791	40,451	11,432,664	919,468	18,836,564	15,594,348	3,949	10
Phenanthrene	58,904	44,305	45,815	49,675	85,180,594	28,829,740	14,899,600	64,454,967	8,028	16
Anthracene	53,063	57,599	56,639	55,767	7,309,813	3,355,003	760,384	5,712,600	2,390	4
Fluoranthene	7,941	7,058	10,972	8,657	512,974	2,556,446	5,359,739	4,214,580	2,053	24
Pyrene	64,009	62,952	61,603	62,854	1,332,999	9,452	1,566,948	1,454,699	1,206	2
Benzo(a)anthracene	2,956	3,376	4,259	3,531	330,114	23,784	531,117	442,508	665	19
Chrysene	9,330	14,132	12,714	12,059	7,446,228	4,298,250	429,753	6,087,116	2,467	20
Benzo(b)fluoranthene	5,040	7,464	11,773	8,092	9,315,382	394,942	13,546,489	11,628,407	3,410	42
Benzo(k)fluoranthene	1,112	1,740	1,920	1,591	229,015	22,334	108,314	179,832	424	27
Benzo(a)pyrene	450	639	1,100	729	78,089	8,241	137,064	111,697	334	46
Indeno(123-cd)pyrene	119	174	192	162	1,820	152	920	1,446	38	23
Dibenzo(ah)anthracene	82	159	123	121	1,547	1,394	4	1,472	38	32
Benzo(ghi)perylene	463	392	438	431	1,038	1,530	47	1,308	36	8

b) Spiked moss samples of 2000 ng/g ($n=3$)

Compound	1	2	3	Mean	$(y_1 - x)^2$, a ($\times 10^3$)	$(y_2 - x)^2$, b ($\times 10^3$)	$(y_3 - x)^2$, c ($\times 10^3$)	$(a+b+c)/2$ ($\times 10^3$)	$\sqrt{(a+b+c)/2}$	RSD % ($n=3$)
Naphthalene	103,508	103,278	82,094	96,293	52,045	48,788	201,614	151,224	12,297	13
Acenaphthylene	101,656	97,821	139,397	112,958	127,730	229,132	699,014	527,938	22,977	20
Acenaphthene	193,917	186,310	170,374	183,533	107,811	7,709	173,179	144,350	12,015	7
Fluorene	209,782	215,825	204,410	210,006	49	33,863	31,312	32,613	5,711	3
Phenanthrene	190,558	161,070	199,657	183,762	46,188	514,901	252,658	406,874	20,171	11
Anthracene	199,908	193,173	248,942	214,008	198,803	434,074	1,220,399	926,638	30,441	14
Fluoranthene	139,009	90,470	106,015	111,831	738,649	456,316	33,832	614,399	24,787	22
Pyrene	227,865	223,272	212,289	221,142	45,200	4,535	78,373	64,054	8,003	4
Benzo(a)anthracene	54,561	38,806	53,492	48,953	31,452	102,970	20,604	77,513	8,804	18
Chrysene	54,345	53,505	55,405	54,418	5	834	973	906	952	2
Benzo(b)fluoranthene	27,322	33,443	37,306	32,690	28,821	567	21,302	25,345	5,034	15
Benzo(k)fluoranthene	29,433	11,673	19,437	20,181	85,595	72,384	553	79,266	8,903	44
Benzo(a)pyrene	7,674	7,438	9,579	8,230	309	627	1,818	1,377	1,174	14
Indeno(123-cd)pyrene	3,306	2,430	3,098	2,945	130	264	23	209	457	16
Dibenzo(ah)anthracene	1,422	1,803	1,640	1,622	39	33	328 (/10 ³)	36	191	12
Benzo(ghi)perylene	5,377	3,193	3,658	4,076	1,692	779	174	1,323	1,150	28

c) Spiked moss samples of 2600 ng/g ($n=3$)

Compound	1	2	3	Mean	$(y_1 - x)^2$, a ($\times 10^3$)	$(y_2 - x)^2$, b ($\times 10^3$)	$(y_3 - x)^2$, c ($\times 10^3$)	$(a+b+c)/2$ ($\times 10^3$)	$\sqrt{(a+b+c)/2}$	RSD % ($n=3$)
Naphthalene	105,773	122,925	144,393	124,363	345,617	2,069	401,169	374,427	19,350	16
Acenaphthylene	83,618	173,776	142,311	133,235	2,461	1,643,590	82,371	2,093,910	45,759	34
Acenaphthene	203,566	229,817	258,201	230,528	726	505	765,807	746,634	27,325	12
Fluorene	215,778	280,799	344,191	280,256	4,157	294	4,087,684	4,122,695	64,208	23
Phenanthrene	183,716	200,071	276,527	220,105	1,324	401,356	3,183,492	2,454,487	49,543	23
Anthracene	208,981	309,562	258,515	259,019	2,503	2,554,561	254	2,529,341	50,293	19
Fluoranthene	133,237	114,984	179,499	142,573	87	761,177	1,363,521	1,105,933	33,256	23
Pyrene	312,100	217,425	165,582	231,702	6,463	203,848	4,371,883	5,519,767	74,295	32
Benzo(a)anthracene	59,757	57,548	93,960	70,422	113	165,731	554,037	416,748	20,414	29
Chrysene	64,722	65,586	97,057	75,788	122	104,083	452,337	339,439	18,424	24
Benzo(b)fluoranthene	33,617	29,857	30,782	31,419	4	2,437	405	3,837	1,959	6
Benzo(k)fluoranthene	31,206	21,919	27,290	26,805	19	23,870	235	21,735	4,662	17
Benzo(a)pyrene	6,797	12,161	4,886	7,948	1	17	9,375	14,226	3,772	47
Indeno(123-cd)pyrene	6,862	1,798	2,930	3,863	8	4	870	7,062	2,658	69
Dibenzo(ah)anthracene	2,113	1,513	3,153	2,260	21 (/10 ³)	557(/10 ³)	797	688	830	37
Benzo(ghi)perylene	5,222	7,239	4,578	5,680	209	2,432	1,214	1,928	1,389	24

3) For the accuracy (recovery %):

a) Unspiked moss samples ($n=3$)

Compound	1	2	3	Mean	Concentration
Naphthalene	41,844	41,318	41,783	41,648	46.88
Acenaphthylene	17,024	14,337	14,375	15,245	41.87
Acenaphthene	5,671	10,746	14,306	10,241	53.45
Fluorene	32,555	19,430	25,110	25,698	22.72
Phenanthrene	49,663	46,289	31,138	42,363	6.21
Anthracene	40,344	42,004	43,707	42,018	-62.52
Fluoranthene	2,316	1,955	2,346	2,206	23.97
Pyrene	43,954	58,218	44,014	48,729	-16.06
Benzo(a)anthracene	0	0	32	11	40.74
Chrysene	7,256	8,568	8,657	8,160	36.48
Benzo(b)fluoranthene	5,465	5,891	7,894	6,417	100.33
Benzo(k)fluoranthene	784	640	264	562	121.72
Benzo(a)pyrene	224	312	305	280	109.43
Indeno(123-cd)pyrene	167	110	46	108	157.93
Dibenzo(ah)anthracene	138	82	31	84	65.35
Benzo(ghi)perylene	239	238	182	220	147.23

b) Spiked moss samples at 150 ng/g ($n=3$)

Compound	1	2	3	Mean	Concentration
Naphthalene	46,315	43,066	47,174	45,518	178.20
Acenaphthylene	22,751	20,781	17,687	20,406	161.50
Acenaphthene	24,913	18,374	21,872	21,720	190.87
Fluorene	37,070	39,492	44,791	40,451	189.48
Phenanthrene	58,904	44,305	45,815	49,675	127.56
Anthracene	53,063	57,599	56,639	55,767	111.35
Fluoranthene	7,941	7,058	10,972	8,657	152.07
Pyrene	64,009	62,952	61,603	62,854	153.47
Benzo(a)anthracene	2,956	3,376	4,259	3,531	193.60
Chrysene	9,330	14,132	12,714	12,059	210.19
Benzo(b)fluoranthene	5,040	7,464	11,773	8,092	252.45
Benzo(k)fluoranthene	1,112	1,740	1,920	1,591	222.08
Benzo(a)pyrene	450	639	1,100	729	231.78
Indeno(123-cd)pyrene	119	174	192	162	191.81
Dibenzo(ah)anthracene	82	159	123	121	118.48
Benzo(ghi)perylene	463	392	438	431	240.44

c) Spiked moss samples at 2600 ng/g ($n=3$)

Compound	1	2	3	Mean	Concentration
Naphthalene	103,508	103,278	82,094	96,293	1,901.20
Acenaphthylene	101,656	97,821	139,397	112,958	2,306.83
Acenaphthene	193,917	186,310	170,374	183,533	2,128.11
Fluorene	209,782	215,825	204,410	210,006	2,106.05
Phenanthrene	190,558	161,070	199,657	183,762	2,352.96
Anthracene	199,908	193,173	248,942	214,008	2,112.42
Fluoranthene	139,009	90,470	106,015	111,831	2,200.89
Pyrene	227,865	223,272	212,289	221,142	2,053.21
Benzo(a)anthracene	54,561	38,806	53,492	48,953	2,166.18
Chrysene	54,345	53,505	55,405	54,418	2,097.52
Benzo(b)fluoranthene	27,322	33,443	37,306	32,690	2,485.57
Benzo(k)fluoranthene	29,433	11,673	19,437	20,181	2,036.83
Benzo(a)pyrene	7,674	7,438	9,579	8,230	2,274.78
Indeno(123-cd)pyrene	3,306	2,430	3,098	2,945	1,933.99
Dibenzo(ah)anthracene	1,422	1,803	1,640	1,622	2,240.73
Benzo(ghi)perylene	5,377	3,193	3,658	4,076	1,849.18

4) For the limit of detection (LOD) and limit of quantitation (LOQ):

a) Spiked moss samples at 150 ng/g ($n=5$)

Compound	1	2	3	4	5	Mean
Naphthalene	46,315	43,066	47,174	54,738	43,399	46,938
Acenaphthylene	22,751	20,781	17,687	18,076	17,560	19,371
Acenaphthene	24,913	18,374	21,872	18,807	18,087	20,411
Fluorene	37,070	39,492	44,791	53,232	47,237	44,364
Phenanthrene	58,904	44,305	45,815	41,022	41,411	46,291
Anthracene	53,063	57,599	56,639	50,561	57,150	55,002
Fluoranthene	7,941	7,058	10,972	5,454	11,167	8,518
Pyrene	64,009	62,952	61,603	59,480	46,594	58,928
Benzo(a)anthracene	2,956	3,376	4,259	2,483	3,436	3,302
Chrysene	9,330	14,132	12,714	8,175	9,639	10,798
Benzo(b)fluoranthene	5,040	7,464	11,773	6,959	5,667	7,381
Benzo(k)fluoranthene	1,112	1,740	1,920	2,207	1,620	1,720
Benzo(a)pyrene	450	639	1,100	1,541	1,246	995
Indeno(123-cd)pyrene	119	174	192	188	80	151
Dibenzo(ah)anthracene	82	159	123	159	118	128
Benzo(ghi)perylene	463	392	438	256	273	364

a) Calculation for LOD and LOQ

Compound	$(y_1 - x)^2$, a	$(y_2 - x)^2$, b	$(y_3 - x)^2$, c	$(y_4 - x)^2$, d	$(y_5 - x)^2$, e	$(a+b+c+d+e)$ /4	Sqrt $[(a+b+c+d+e)/4]$
Naphthalene	447.80	17,263.34	63.99	70,047.33	14,427.05	25,562.38	159.88
Acenaphthylene	6,139.34	1,067.61	1,523.23	901.63	1,761.69	2,848.37	53.37
Acenaphthene	2,905.09	594.49	306.11	368.42	773.85	1,236.99	35.17
Fluorene	6,798.77	3,033.12	23.27	10,047.38	1,054.19	5,239.18	72.38
Phenanthrene	43,818.86	1,086.36	62.57	7,648.88	6,561.29	14,794.49	121.63
Anthracene	601.19	1,078.03	428.40	3,154.77	737.42	1,499.95	38.73
Fluoranthene	131.56	840.87	2,374.20	3,702.68	2,765.86	2,453.79	49.54
Pyrene	3,719.37	2,332.58	1,030.82	44.02	21,911.20	7,259.49	85.20
Benzo(a)anthracene	226.12	10.35	1,727.47	1,264.80	33.90	815.66	28.56
Chrysene	4,278.88	22,064.59	7,289.22	13,656.20	2,667.27	12,489.04	111.75
Benzo(b)fluoranthene	45,145.16	57.14	159,004.13	1,465.91	24,196.28	57,467.15	239.72
Benzo(k)fluoranthene	3,519.55	3.91	380.92	2,259.44	94.15	1,564.49	39.55
Benzo(a)pyrene	73,438.63	73,438.63	73,438.63	73,438.63	73,438.63	91,798.29	302.98
Indeno(123-cd)pyrene	388.09	217.07	676.12	532.71	1,946.23	940.05	30.66
Dibenzo(ah)anthracene	4,271.38	1,857.52	47.40	1,898.39	208.20	2,070.72	45.51
Benzo(ghi)perylene	1,898.32	146.20	1,049.14	2,296.69	1,610.23	1,750.14	41.83

RAW DATA FOR REAL MOSS SAMPLES

Moss samples from every location were done in triplicate

Compound	Fraser's Hill			Livillas Condominium		
	1	2	3	1	2	3
Naphthalene	41,844	41,318	41,581	46,315	43,066	44,691
Acenaphthylene	17,024	14,337	15,681	22,751	20,781	21,766
Acenaphthene	5,671	10,746	8,209	24,913	18,374	21,643
Fluorene	32,555	19,430	25,993	37,070	39,492	38,281
Phenanthrene	49,663	46,289	47,976	58,904	44,305	51,605
Anthracene	40,344	42,004	41,174	53,063	57,599	55,331
Fluoranthene	2,316	1,955	2,136	7,941	7,058	7,499
Pyrene	43,954	58,218	51,086	64,009	62,952	63,480
Benzo(a)anthracene	0	0	0	2,956	3,376	3,166
Chrysene	7,256	8,568	7,912	9,330	14,132	11,731
Benzo(b)fluoranthene	5,465	5,891	5,678	5,040	7,464	6,252
Benzo(k)fluoranthene	784	640	712	1,112	1,740	1,426
Benzo(a)pyrene	224	312	268	450	639	544
Indeno(123-cd)pyrene	167	110	139	119	174	147
Dibenzo(ah)anthracene	138	82	110	82	159	120
Benzo(ghi)perylene	239	238	238	463	392	427

Compound	Jalan 17/21			Chemistry Department		
	1	2	3	1	2	3
Naphthalene	52,771	41,521	47,146	60,063	43,943	52,003
Acenaphthylene	20,204	24,661	22,432	67,466	8,687	38,076
Acenaphthene	27,933	28,852	28,393	56,739	33,103	44,921
Fluorene	37,276	58,449	47,862	65,463	56,029	60,746
Phenanthrene	55,593	57,063	56,328	38,827	86,169	62,498
Anthracene	81,706	46,325	64,015	131,264	86,454	108,859
Fluoranthene	8,806	13,780	11,293	29,754	26,141	27,948
Pyrene	88,913	55,104	72,009	118,294	69,726	94,010
Benzo(a)anthracene	4,240	5,795	5,018	753	16,158	8,456
Chrysene	13,405	10,809	12,107	12,194	23,031	17,612
Benzo(b)fluoranthene	6,014	7,905	6,959	2,675	20,327	11,501
Benzo(k)fluoranthene	3,190	1,261	2,225	1,068	5,147	3,108
Benzo(a)pyrene	336	959	648	971	2,320	1,645
Indeno(123-cd)pyrene	224	215	220	605	680	643
Dibenzo(ah)anthracene	219	189	204	552	232	392
Benzo(ghi)perylene	701	654	678	646	751	699

Compound	Jalan Universiti			Jalan Pudu		
	1	2	3	1	2	3
Naphthalene	41,844	41,318	41,581	46,315	43,066	44,691
Acenaphthylene	17,024	14,337	15,681	22,751	20,781	21,766
Acenaphthene	5,671	10,746	8,209	24,913	18,374	21,643
Fluorene	32,555	19,430	25,993	37,070	39,492	38,281
Phenanthrene	49,663	46,289	47,976	58,904	44,305	51,605
Anthracene	40,344	42,004	41,174	53,063	57,599	55,331
Fluoranthene	2,316	1,955	2,136	7,941	7,058	7,499
Pyrene	43,954	58,218	51,086	64,009	62,952	63,480
Benzo(a)anthracene	0	0	0	2,956	3,376	3,166
Chrysene	7,256	8,568	7,912	9,330	14,132	11,731
Benzo(b)fluoranthene	5,465	5,891	5,678	5,040	7,464	6,252
Benzo(k)fluoranthene	784	640	712	1,112	1,740	1,426
Benzo(a)pyrene	224	312	268	450	639	544
Indeno(123-cd)pyrene	167	110	139	119	174	147
Dibenzo(ah)anthracene	138	82	110	82	159	120
Benzo(ghi)perylene	239	238	238	463	392	427