

External trap-and-release membrane-inlet for photoionization mass spectrometry: Towards fast direct analysis of aromatic pollutants in aquatic systems.

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Table A 1: Repeatability of selected polycyclic aromatic hydrocarbons (PAH) at 3 different concentrations. Because of high variations in heating rates, variations in peak shapes can be observed, whereas peak areas show less variations than the corresponding signal heights

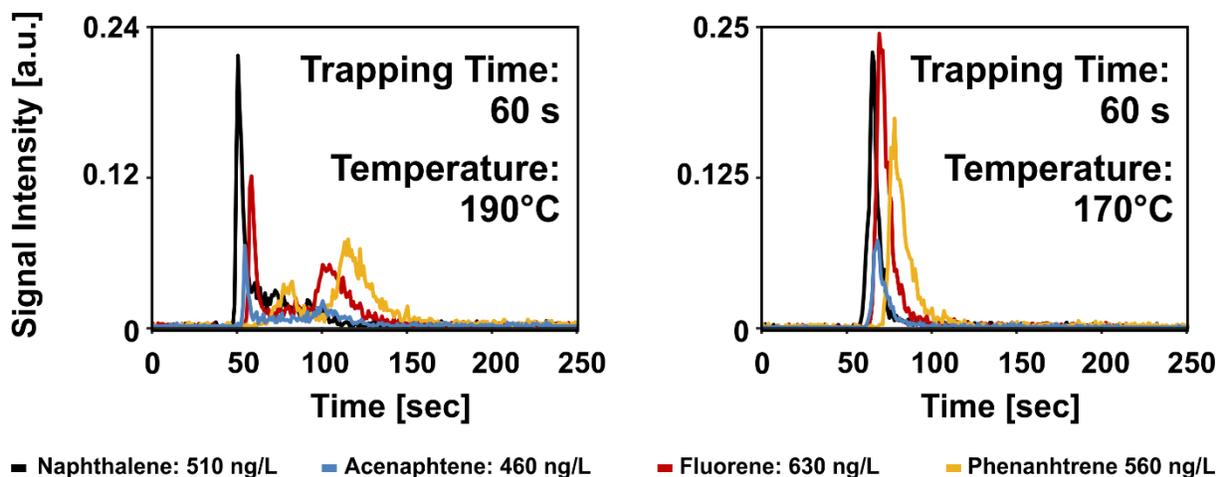


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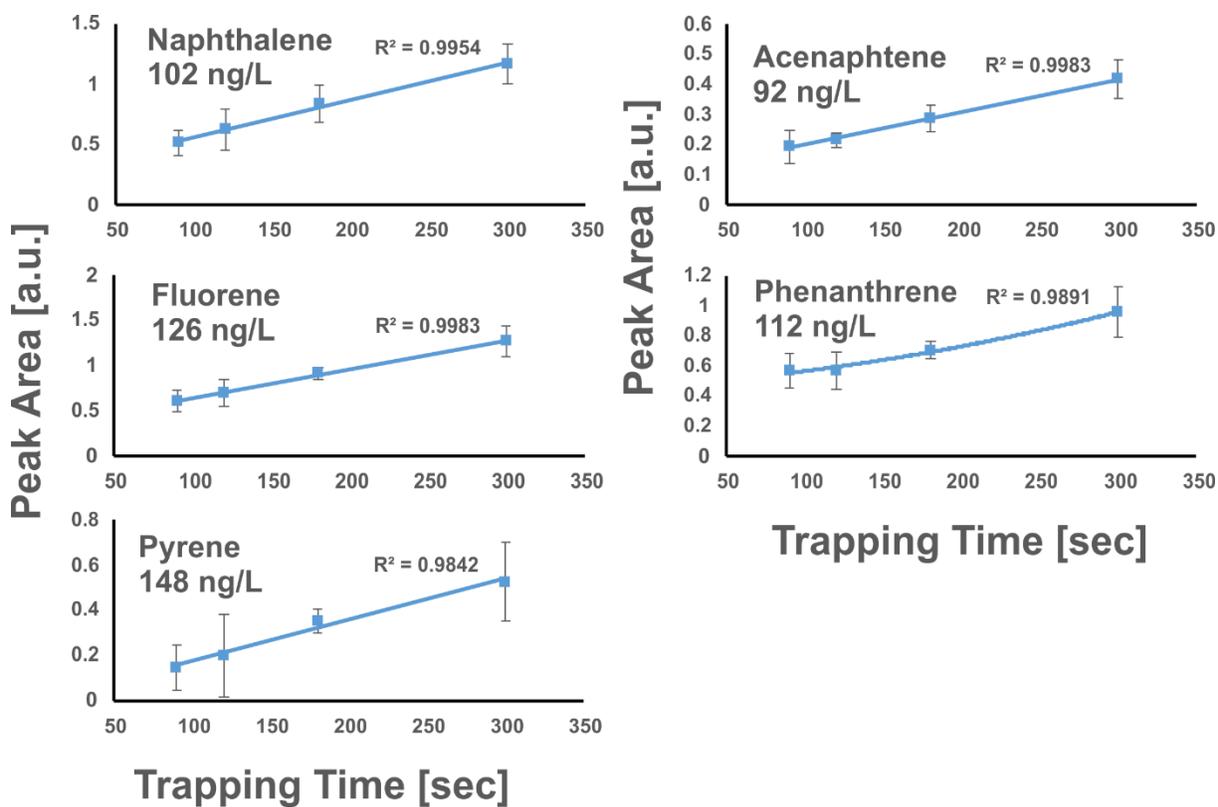


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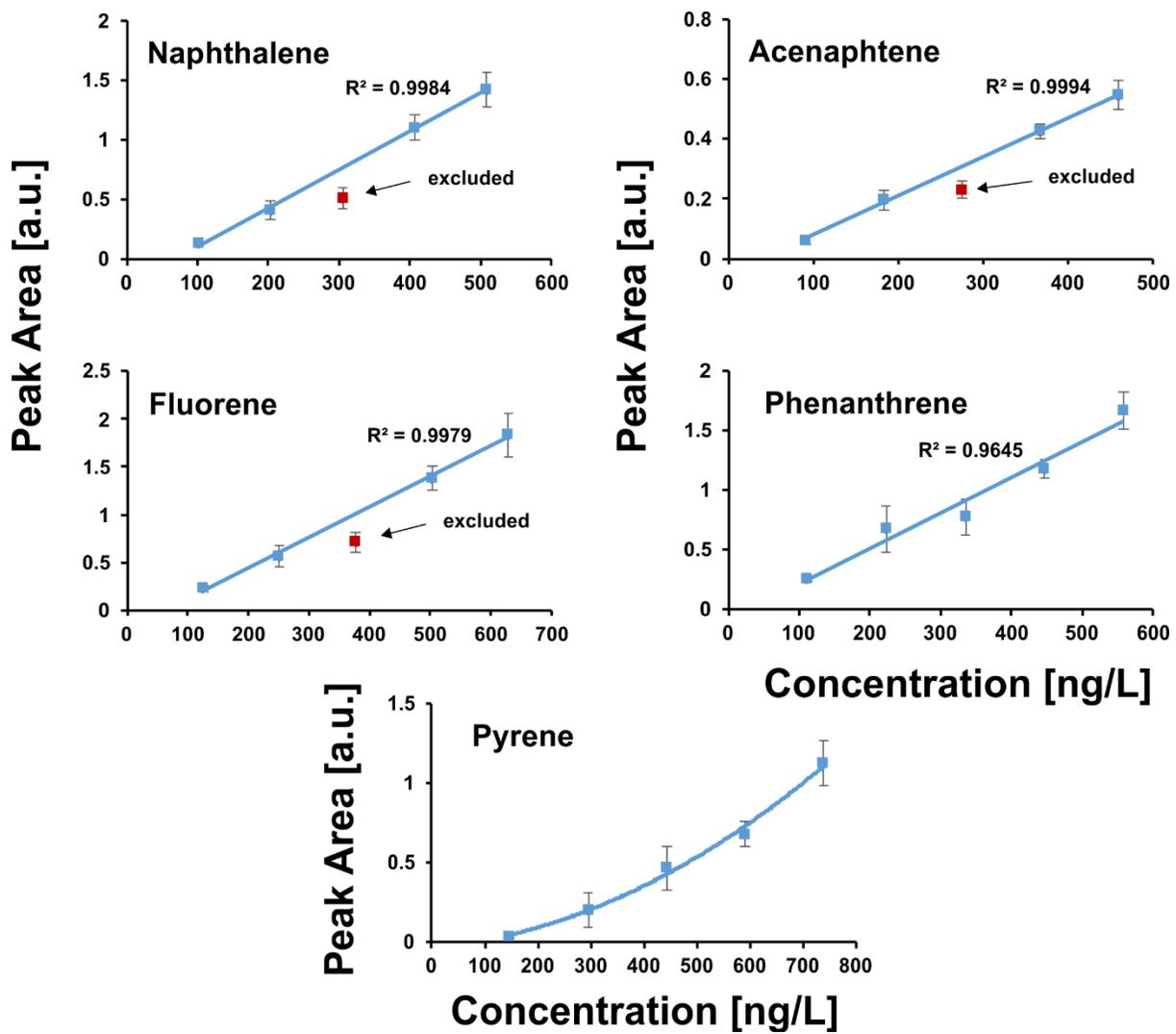
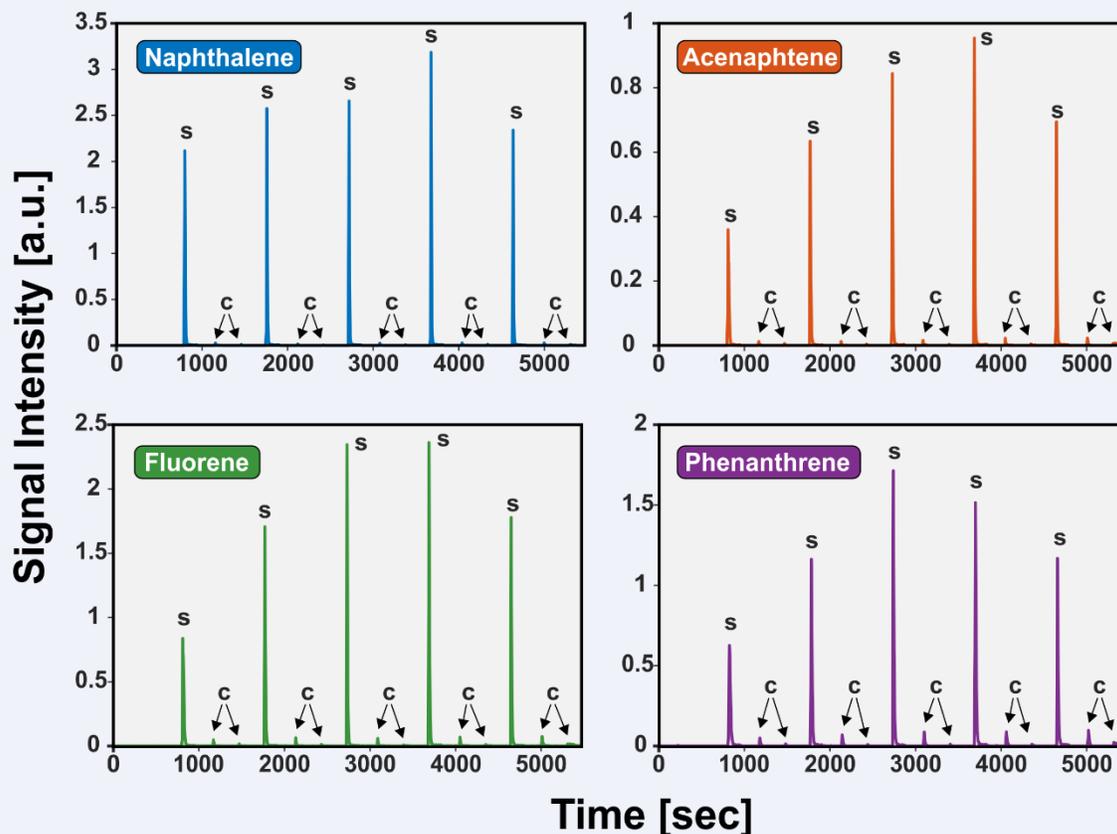


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Ion traces of selected PAHs obtained by T&R-EHFMI-REMPI-TOFMS



Averaged values for 5 consecutive measurements

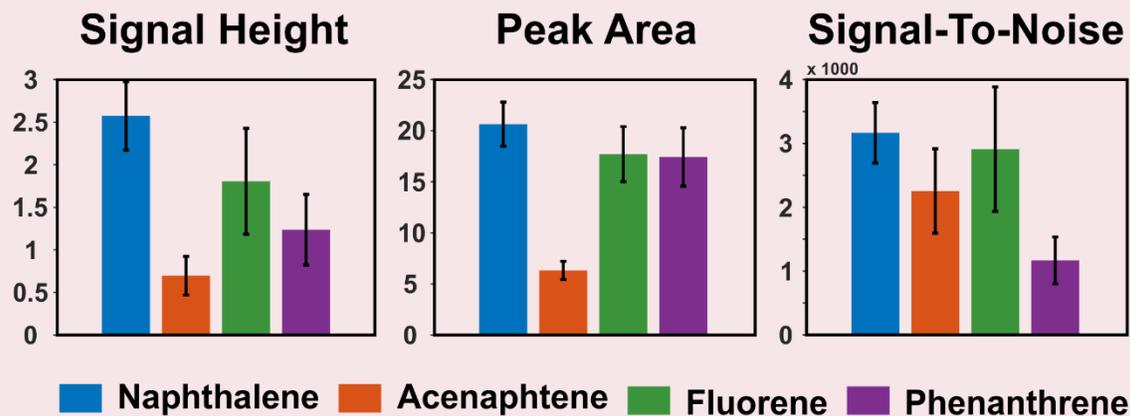


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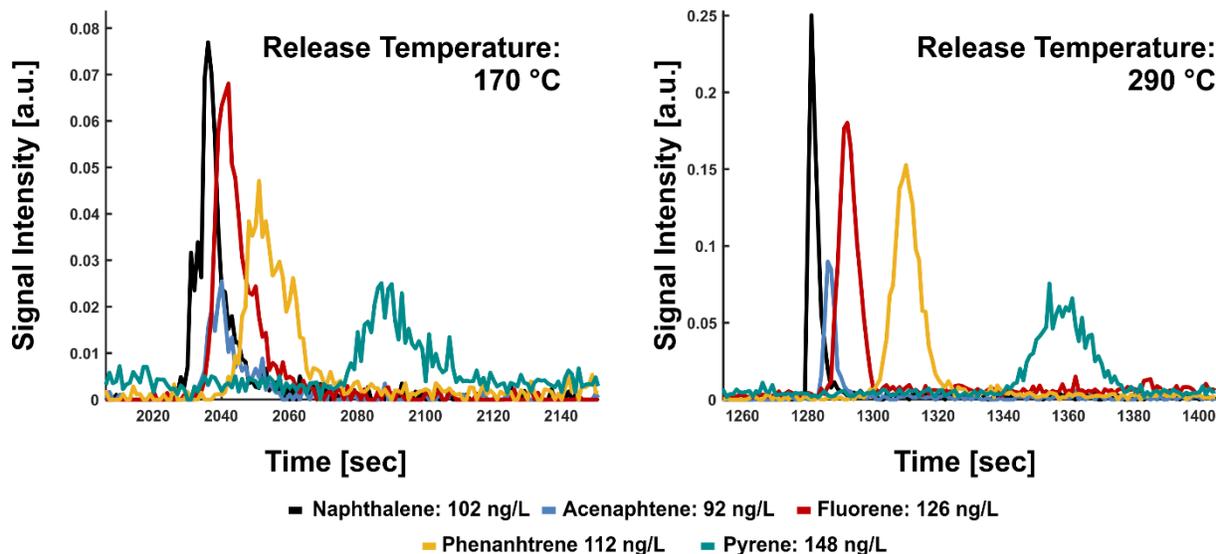


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Heavy Fuel Oil

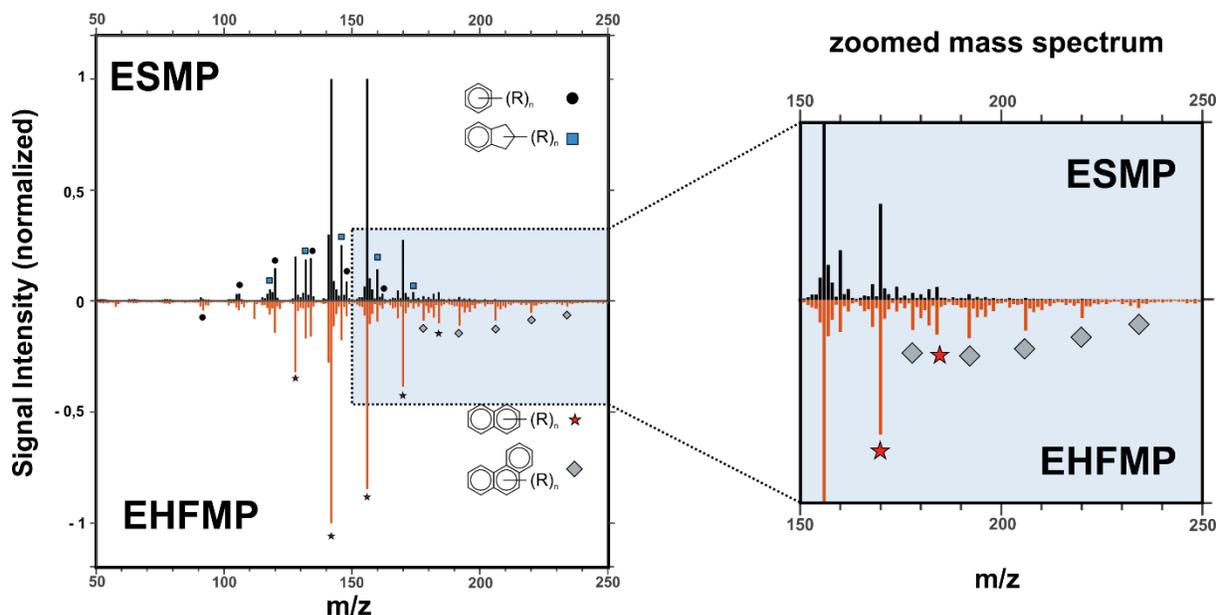


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m/z	Concentration [ng/L]		Peak Number					Mean	RSD
			1	2	3	4	5		
128	102	PA	0.112	0.145	0.139	0.126	0.140	0.132	9%
		SH	0.013	0.018	0.015	0.012	0.018	0.015	17%
	408	PA	1.095	1.101	1.203	1.184	0.907	1.098	10%
		SH	0.138	0.127	0.130	0.127	0.107	0.126	8%
	510	PA	1.590	1.189	1.404	1.354	1.547	1.417	10%
		SH	0.158	0.109	0.163	0.148	0.206	0.157	20%
154	92	PA	0.033	0.070	0.068	0.052	0.075	0.060	26%
		SH	0.004	0.007	0.010	0.008	0.011	0.008	31%
	368	PA	0.437	0.383	0.444	0.449	0.409	0.424	6%
		SH	0.046	0.027	0.028	0.038	0.043	0.036	21%
	460	PA	0.563	0.471	0.519	0.561	0.615	0.546	9%
		SH	0.036	0.035	0.042	0.060	0.070	0.049	29%
166	126	PA	0.202	0.205	0.278	0.179	0.257	0.224	17%
		SH	0.015	0.021	0.029	0.016	0.028	0.022	27%
	504	PA	1.445	1.239	1.538	1.427	1.232	1.376	9%
		SH	0.150	0.105	0.103	0.096	0.107	0.112	17%
	630	PA	1.896	1.593	1.635	1.793	2.223	1.828	12%
		SH	0.112	0.110	0.119	0.190	0.243	0.155	34%
178	112	PA	0.235	0.234	0.262	0.230	0.271	0.247	7%
		SH	0.018	0.016	0.022	0.019	0.022	0.019	12%
	448	PA	1.245	1.052	1.238	1.194	1.099	1.166	7%
		SH	0.085	0.083	0.079	0.066	0.072	0.077	9%
	560	PA	1.584	1.593	1.479	1.716	1.930	1.660	9%
		SH	0.096	0.099	0.102	0.146	0.156	0.120	21%

PA: Peak Area; SH: Signal Height