

Supplementary Information for

**Photofragment Ionization-loss Stimulated Raman Spectroscopy of a Hydrated
Neurotransmitter: 2-Phenylethylamine–water**

*Nitzan Mayorkas, Snir Cohen, Hanan Sachs, and Ilana Bar**

Table S1. Measured ionization-loss stimulated Raman vibrational transition frequencies (cm^{-1}) of PEA and of PEA- H_2O .

PEA	PEA- H_2O
	3716
3414	3401
3346	3350
	3328
3078	3076
3065	3066
3050	3053
3015	3016
	3011
	2973
2960	2963
2934	2938
	2929
2922	2924
2865	2875
2849	2869
	2823
1612	1614
1592	1592
1475	1477
1445	1454
1400	
1387	1387
1344	1373
	1353
	1346
	1336
1330	1326
	1309
1208	1212
	1198
1179	1186
	1158

1140	1143
1091	
1087	
1062	1076
1033	1036
1021	
1005	1007
994	
977	
917	916
909	
	889
864	863
766	768
761	
749	751
713	
623	623
572	573
491	494
