Introducing integral optimised warping (IOW) approach for achieving swift alignment of drifted chromatographic peaks: An optimisation of correlation optimised warping (COW) technique

Keshav Kumar

Institute for Wine analysis and Beverage Research, Hochschule Geisenheim University, Geisenheim 65366, Germany

Email ID: keshavkumar29@gmail.com

Supplementary Information

Table S1. $P_{avg},\ W_{avg}$ and A_{avg} values for Peak1-Peak11 for generating the reference chromatogram

Peak	Average peak Position (P_{avg})	Average Width (W _{avg})	Average Amplitude (A _{avg})
Peak 1 Book 2	77	2.01	0.61
Peak 2 Peak 3	227	2.35	0.47
Peak 4	287	5.00	0.47
Peak 5	347	3.65	0.31
Peak 6	398	4.00	0.85
Peak 7	517	3.35	0.82
Peak 8	577	2.95	0.37
Peak 9	647	1.75	0.62
Peak 10	697	1.95	0.53
Peak 11	807	2.95	0.24

Peak	Average peak Position (P_{avg})	Average Width (W _{avg})	Average Amplitude (A _{avg})
Peak 1	138	4	32
Peak 2	249	18	17
Peak 3	805	19	2.36
Peak 4	1081	15	4.37
Peak 5	1321	12	18.72
Peak 6	1732	7	10.01
Peak 7	2490	8	11.56

Table S2. $P_{avg},\,W_{avg}$ and A_{avg} for each of the seven peaks (Peak1-Peak7) for generating the reference chromatogram



Figure S1. COW aligned chromatograms. The COW analysis is carried out using the Chro2 as reference chromatogram with optimized slack (t) and segment length (m).