

Four columns were tested to improve the separation in the first dimension of methyl-PAHs: DB-XLB 30 m, HT-8 50 m, DB-5 30 m and DB-5 60 m, The separation of five methyl-benzo[c]phenanthrenes on the four columns was similar. The different chromatographic separations of twelve methyl-benz[a]anthracenes (1-12MBA) and six methyl-chrysenes (1-6MC) are presented in Figures 1-4.

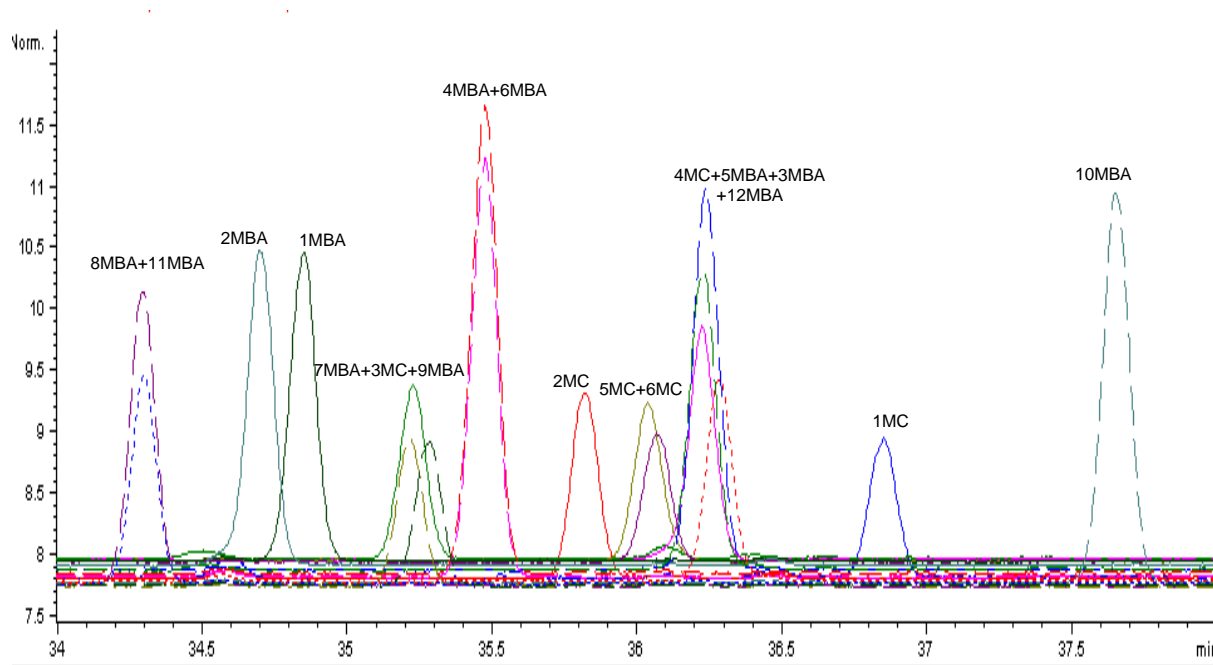


Figure 1. GC-FID chromatogram of eighteen homologues of methyl-chrysenes (1-6MC) and methyl-benz[a]anthracenes (1-12MBA) obtained on DB-XLB (30m).

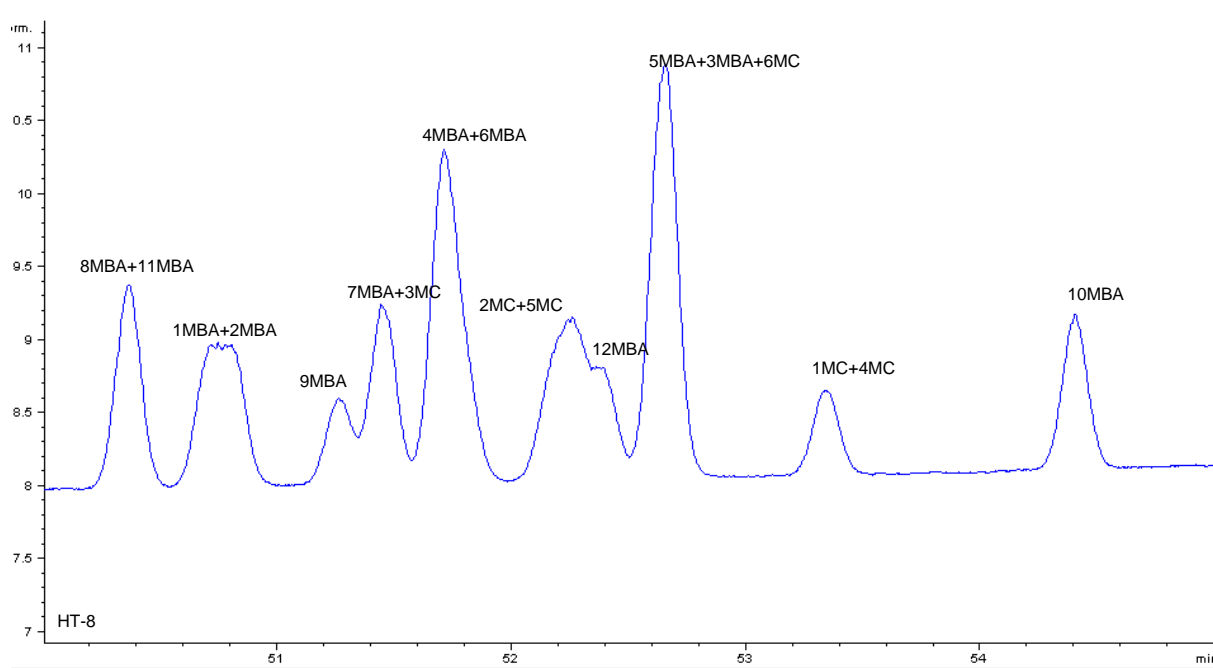


Figure 2. GC-FID chromatogram of eighteen homologues of methyl-chrysenes (1-6MC) and methyl-benz[a]anthracenes (1-12MBA) obtained on HT-8 (50m).

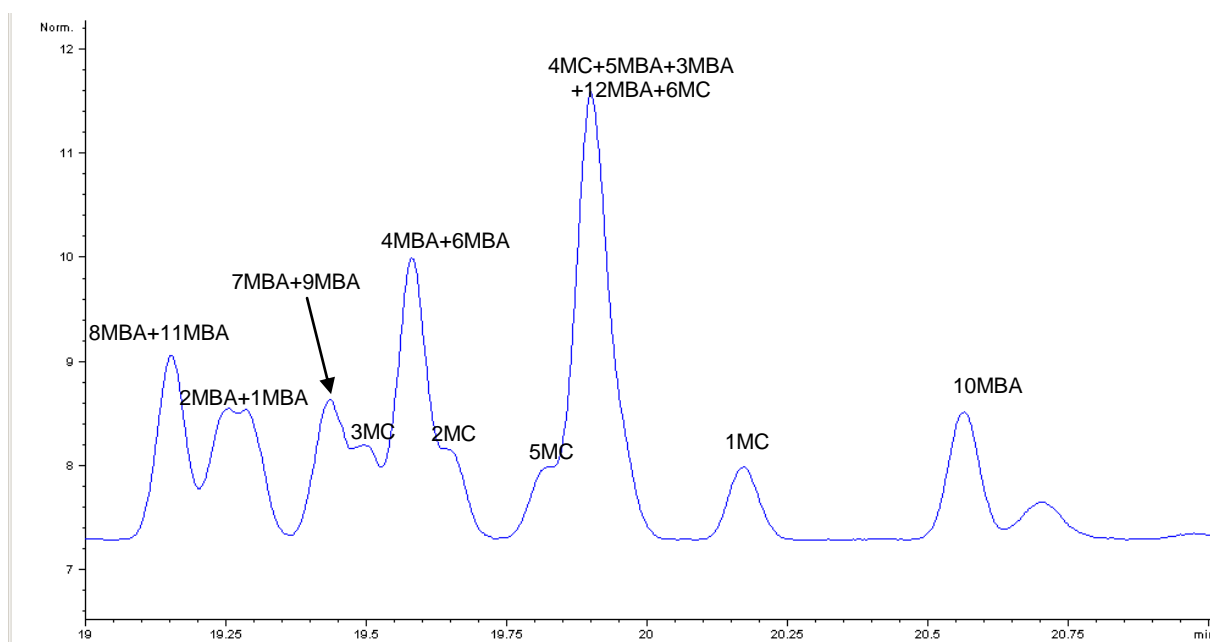


Figure 3. GC-FID chromatogram of eighteen homologues of methyl-chrysenes (1-6MC) and methyl-benz[a]anthracenes (1-12MBA) obtained on DB-5 (30m).

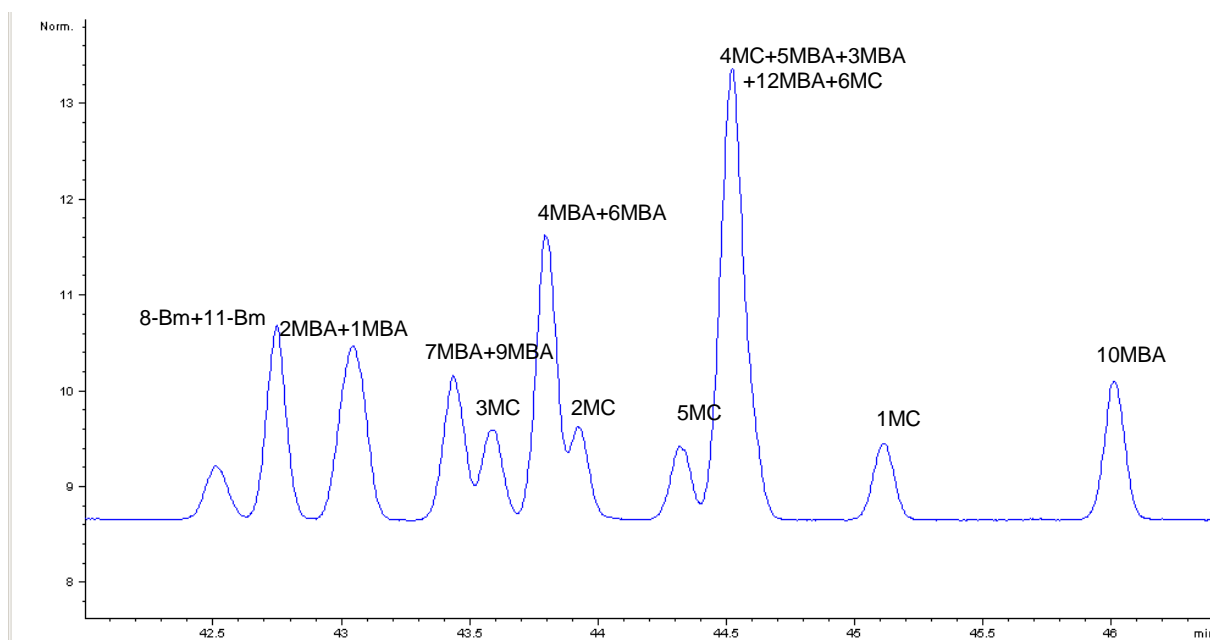


Figure 4. GC-FID chromatogram of eighteen homologues of methyl-chrysenes (1-6MC) and methyl-benz[a]anthracenes (1-12MBA) obtained on DB-5 (60m).