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Title: Optimisation of temperature-programmed gas chromatographic separation of organochloride pesticides by response surface methodology

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16
17 **Abstract**

18 A response surface methodology (RSM) approach is applied to optimise the temperature-
19 programme gas-chromatographic separation of 16 organochloride pesticides, including 12
20 compounds identified as highly toxic chemicals by the Stockholm Convention on Persistent Organic
21 Pollutants. A three-parameter relationship describing both linear and curve temperature
22 programmes is derived adapting a model previously used in literature to describe concentration
23 gradients in liquid chromatography with binary eluents. To investigate the influence of the three
24 temperature profile descriptors (the starting temperature, the gradient duration and a shape

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