

<b>Title:</b> (Capitalize the first letter of each <u>key</u> word)	Coupled LC-GC Interface Using a SPE Technique and a Large Volume Injection Technique with a Spiral Insert
<b>Abstract:</b> (Your abstract <u>must</u> use Normal style and <u>must</u> fit in this space), Times New Roman Font, 12 point	<p>A new interface using a solid phase extraction (SPE) technique and a large volume injection technique has been developed for coupling of reverse-phase liquid chromatography (LC) with capillary gas chromatography (GC).</p> <p>The system is shown in the following. With adding water to a LC fraction, the diluted fraction is loaded on a SPE cartridge. By this means, the analyte is adsorbed on the SPE. After the cartridge was dried with nitrogen gas, the analyte is eluted from the SPE cartridge with a solvent that can be injected into GC. The eluate is directly injected into a GC injection port via a needle that is fitted with the SPE cartridge. Next, the analyte is transferred to an analytical column of GC by a large volume injection technique. The GC injector consists of a PTV injector equipped with a spiral insert in the shape of a stomach.</p> <p>The purpose of this study is to decide optimum conditions of the volume of water adding to the LC fraction in order to make an analyte adsorb on the SPE cartridge and the volume of eluate in order to elute the analyte from the SPE cartridge. And then, the precision of this LC-(SPE)-GC system has been evaluated under these optimum conditions.</p> <p>Coupling of reverse-phase LC with GC has been accomplished by a new interface using the SPE technique to change the LC fraction eluent into small amount of solvent that can be injected into GC and the stable large volume injection system with spiral insert.</p>