# Solid Phase Extraction Manifold

Researchers from Chemistry Institute of Unicamp developed a technology comprehends a Manifold-like multi-valve device that allows the simultaneous control of multiple SPE cartridges.

It may be applied:
- Diagnostic;
- Drug Development and bioequivalency;
- Isolation and purification of actives from plant extracts.

The advantages of this technology are:
- Enables the percolation of any sample volume;
- Completely removes the need of pauses during the spe procedure;
- Completely removes the possibility of cross-contamination;
- Greatly increases procedure reproducibility through the use of a peristaltic pump;
- The flow rate can be promoted by vacuum and / or peristaltic pump.

**PATENT STATUS**
Utility Model deposited in INPI, PCT requested.

**INTERNAL CODE**
533_MANIFOLD

**MORE INFORMATION:**
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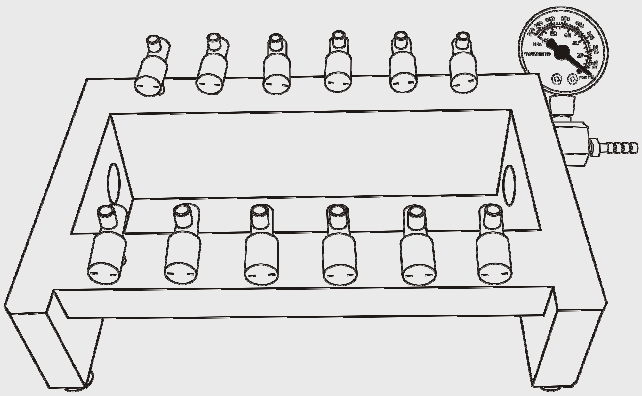
## Device "manifold“-like for solid phase extraction with individual chambers and valves for controlling, by the peristaltic pump and / or full vacuum, the eluate

This technology comprehends a Manifold-like multi-valve device that allows the simultaneous control of multiple SPE cartridges.

Through a set of individual and independent valves the device redirect the discarded eluate to an external recipient different from the one that will receive the eluate of interest. Vacuum flow is also directed through individual and independent valves. The system is also capable of working with peristaltic pumps, enabling greater flow control.



## Responsible Researcher:

**Ricardo Mathias Orlando**

Graduate in Pharmacyat by the Federal University of Mato Grosso do Sul (1999), Master of Toxicology and Toxicological Analysis by the University of São Paulo (2003) and Ph.D. in Analytical Chemistry by the Institute of Chemistry, State University of Campinas (2011). He has experience in analytical chemistry, with emphasis on sample preparation, working mainly with the technique of solid phase extraction. It is the inventor of the solid phase extraction assisted by electric fields with cartridges, called E-SPE.

The team responsible for the invention comprises: Susanne Rath e Jarbas José R. Rohwedder.