专论综述

基于中空纤维的液相微萃取技术的研究进展

王春1,吴秋华1,王志1,韩丹丹2,胡彦学2

1.河北农业大学理学院 河北省生物无机化学重点实验室, 河北 保定 071001; 2.河北农业大学食品科技学院, 河北 保定 071001

收稿日期 2005-11-30 修回日期 2006-3-14 网络版发布日期 2006-10-13 接受日期

摘要 基于中空纤维的液相微萃取集采样、萃取、浓缩于一体,具有成本低,溶剂用量少,易与高效液相色谱、气相色谱、毛细管电泳联用等特点。该技术不仅可实现较高的回收率和富集效率,而且具有突出的样品净化功能,是一种环境友好的样品前处理新技术。该文对基于中空纤维的液相微萃取的装置、操作模式、基本原理及近年来应用研究的进展进行了综述。

关键词 中空纤维 液相微萃取 综述

分类号

Developments of Liquid-Phase Microextraction Based on Hollow Fiber

WANG Chun1, WU Qiuhua1, WANG Zhi1, HAN Dandan2, HU Yanxue2

1. Hebei Key Laboratory of Bioinorganic Chemistry, College of Science, Agricultural University of Hebei, Baoding 071001, China; 2. College of Food Science and Technology, Agricultural University of Hebei, Baoding 071001, China

Abstract

The liquid-phase microextraction (LPME), based on disposable hollow fiber, has been developed to be a new environmentally benign sample preparation technique which incorporate sampling, extraction and concentration into a single step. The novel technique can be easily manipulated in combination with high performance liquid chromatography, gas chromatography and capillary electrophoresis, and can provide excellent sample clean-up effect and high degree of extraction recovery and enrichment. It is proved to be simple, low-cost and virtually solvent-free. The extraction set-up, extraction mode, basic principles and recent applications of the hollow fiber-based liquid-phase microextraction are reviewed.

Key words hollow fiber liquid-phase microextraction review

DOI:

扩展功能

本文信息

- ▶ Supporting info
- ▶ **PDF**(548KB)
- ▶[HTML全文](0KB)
- ▶参考文献

服务与反馈

- ▶把本文推荐给朋友
- ▶加入我的书架
- ▶加入引用管理器
- ▶复制索引
- ▶ Email Alert
- ▶文章反馈
- ▶ 浏览反馈信息

相关信息

▶ <u>本刊中 包含"中空纤维"的</u> 相关文章

▶本文作者相关文章

- 王春
- ・ 吴秋华
- ・ 王志
- 韩丹丹
- 胡彦学

通讯作者 王志 wangzhi@mail.hebau.edu.cn