

技术及应用

## 砷化物浸泡人发中As的滞留行为和分布的仪器中子活化分析

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**摘要** 采用仪器中子活化分析法对砷化物溶液浸泡人发后人发中的砷含量及未经砷化物溶液浸泡的人发中的固有砷含量进行了定量分析。分析结果显示, 经砷化物溶液浸泡后, 每段头发中均含有砷, 且在浸泡处出现砷含量峰值, 与未经浸泡的人发的分析结果对比, 说明砷化物可通过吸附渗透到人发中。为检验分析数据的可靠性, 同时对3种质控样品进行分析, 测定值与认证值在不确定度范围内一致。

**关键词** [中子活化分析](#) [砷](#) [人发](#)

分类号

## Retention and Distribution of As in Arsenide-Treated Human Hair by INAA

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**Abstract** Instrumental neutron activation analysis (INAA) was used to measure the content of arsenic in segmented human hair samples, with and without treatment by arsenide. The results reveal that the contents of arsenic are higher in each segment of the arsenide-treated sample than those of untreated ones, with a peak value at the treated position. The results indicate that arsenide can infiltrate into hair by adsorption. Three certified reference materials were used for verification of the analytical results. The measured values are in agreement with the certified ones within uncertainty limits.

### Key words

[neutron](#) [activation](#) [analysis](#) [arsenic](#) [human](#) [hair](#)

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