水环境重金属元素检测系统的智能化设计

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摘 要：

面向水环境重金属元素检测系统，提出了一种智能化实时检测系统设计方法。系统在初始化过程和检测过程中引入多
误差自动补偿以及自动量程采样方法。在实验室通过锌、镉、铅、铜四种重金属离子标准溶液样品检测实验，结果表
精度，证明了该系统可以有效解决传统检测系统在多种重金属检测中无法自动消除系统误差、检测精度不高的问题，
的解决方案。

关键词：重金属元素；实时检测；智能化设计；系统误差自动补偿；自动量程选择

Design of Intelligent Instrument for Heavy Metals Detection in Wa

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Abstract:

Facing the water environment of the heavy metals detection system, put forward a kind of intellectualized real-time detection
the detection process came into the intellectualization methods. For example, system reliability checking method, system err
range sampling method. In the laboratory by the Zn, Cd, Pb, Cu four kinds of heavy metal ion standard solution detection ex
dramatically, to prove that this system can effectively solve the traditional detection system can't solve the system errors to b
detecting many kinds of heavy metals, providing more perfect solution to the real time monitoring the water environment of t

Keywords: heavy metals; real-time detection; intellectualized design; system error automatic compensation; automatic range