

Graphite furnace atomic absorption spectrophotometry sebagai metode analisis logam berat

Fitri Budiyanto, author

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Abstrak

ABSTRACT

Heavy metal, mostly present in an ultra trace level, becomes one of the hazardous pollutants due to its toxicity, bioaccumulative, and biomagnificative characters. Conducting a micro analysis of these trace level pollutants, sensitive instrument and method are strongly recommended. Graphite Furnace Atomic Absorption Spectrophotometer GFAAS offers a solution for the challenge. It uses the principle of light emission absorption by nascent atom cloud from the metals. The analysis has been developed in three stages of the tube heating programs, i.e. drying, ashing and then atomizing element at 3000 °C. Since the injected sample is almost completely atomized, the sensitivity of GFAAS is extremely high and this value is covering up the disadvantages of the other analyses. Therefore, the GFAAS analysis is suitable for ultra trace analysis of ultra trace pollutant like heavy metals in environment.