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Sequential Spectrophotometric Determination of Trace Amounts of Periodate (IO_4^-) and Molybdate (MoO_4^{2-}) in Synthetic Mixtures and Water Samples

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ABSTRACT

A sensitive and specific spectrophotometric method has been developed for the simultaneous determination of periodate and molybdate at trace levels. The method is based on the colored product of the reaction of periodate with iodide in acidic medium and its determination spectrophotometrically at 358 nm in presence of molybdate. The molybdate analysis method is based on formation of unextractable colored complexes of it with tannic acid .Different variables affecting the reactions are optimised. The method is precise and accurate and has been applied to synthetic mixtures and water samples.

Keywords: Periodate, Molybdate,Tannic acid, water samples, Spectrophotometric estimation.
