# Simple Cost-Effective Sequential Injection Lab at Valve with Remote Control Employing Everyday Communication Technology with a Webcam Camera Detector for the Determination of Iron and Phosphate as Model Analytes

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## ABSTRACT

***Simple cost-effective sequential injection lab at valve (SI-LAV) with remote control employing everyday communication technology, and including a webcam camera detector, was developed for the determination of iron and phosphate as model analytes. The use of a webcam as a detector allowed recording of color data and monitoring flow behavior simultaneously. The remotely controlled system was operated via the internet using readily available software. The utility of the proposed system was investigated for the iron and phosphate reactions, representing fast and slow reaction models, respectively. The system performance was also demonstrated for the assay of phosphate in real samples.***

**Keywords:** Sequential injection lab at valve (SI-LAV), Remote control, Webcam, Information technology (IT), Phosphate, Iron