

# Flow-through photometric sensor for the determination of cadmium at toe nanogram per millilitre level

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A sensor for the determination of cadmium based on retention of the CdI<sub>4</sub><sup>2-</sup> complex on a QAE Sephadex resin located in the flow-cell of a conventional photometric detector and on subsequent complex displacement reaction with 4-(2-pyridylazo)-resorcinol is proposed. Formation of the colored chelate and detection take place simultaneously. The method features a determination range between 30 and 500 ng/ml of Cd(II) with relative standard deviations of 1.8% and 3.4% for 200 and 50 ng/ml of Cd(II), respectively. The selectivity involved in the use of the proposed sensor is shown in the study of interference. © 1993, Taylor & Francis Group, LLC. All rights reserved.