
ARTICLES

Determination of UV-Absorbing Anions in Environmental Samples by Microcolumn High-Performance Liquid Chromatography

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Abstract—The chromatographic retention and separation of NO_2^- , Br^- , NO_3^- , and I^- anions on a column packed with Nucleosil 100-5 C18 dynamically modified with trimethyloctadecylammonium bromide (TMODAB) was studied using direct UV detection. A procedure was developed for the determination of the above anions in the concentration range 0.06–2500 $\mu\text{g/L}$ without preconcentration. Sample preparation involved only the elimination of organic impurities (if present) from the test sample. The procedure was used for the determination of NO_2^- and NO_3^- anions in Baikal Lake water and in an aerosol extract.