

## **Catalytic current of BrO<sub>3</sub><sup>-</sup> and its use for the determination of chromium traces**

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### **Abstract**

The first observation of the catalytic wave of BrO<sub>3</sub><sup>-</sup> at a dropping mercury electrode at the potential of the reduction of Cr(III) to Cr(II) in an ammonium buffer solution is reported. A mechanism is proposed for the catalytic process involving Cr(III) and Cr(II) ammonia complexes and their ion pairs with BrO<sub>3</sub><sup>-</sup> and complicated by adsorption. It was shown that chromium traces can be determined by polarography under classical conditions and by flow-injection analysis with voltammetric detection. © 1999 MAEe Cyrillic signK "Hayka/Interperiodica".

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