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# 电致初生态氧化剂的化学发光行为研究及其分析应用

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摘要 基于一种新型流通电解池的设计，结合恒电流电解技术与流动注射技术，使电生于电极表面附近的溴具有初生态的化学发光反应活性。它可直接氧化异烟肼而产生强度高、反应速度快的化学发光现象，据此建立了测定异烟肼的电化学发光新方法，同时，提出一种研究、探索初生态试剂化学发光分析的新思想和新方法。

关键词 初生态 氧化剂 溴 电解槽 流动注射分析 化学发光 电致发光 异烟肼

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## The investigation of chemiluminescence reaction characteristic of the in situ electrogenerated Br2 and its anaytical application for isoniazid

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**Abstract** By both designing a novel electrolytic flow cell and using the flow- injection techniuqe, the nascent Br2 was in situ electrogenerated on the surface of platinum electrode with constant current electrolytic method in the H2SO4-KBr medium. It was then found that compared with reagent Br2 as well as on-line electrogenerated Br2, the in situ electrogenerated Br2 could oxidize the isoniazid injected accompanying by a stronger chemiluminescence signal. Based on this observation, a new flow-ijjection electrogenerated chemiluminescence method for the determination of isoniazid was proposed. At the same time, a new concept, which can be used to explore the CL properties of the in situ electrogenerated reagent and to improve the sensitivity of CL analysis, was also proposed.

**Key words** NASCENCY OXIDANT BROMINE ELECTROLYTIC CELL FLOW INJECTION ANALYSIS CHEMILUMINESSENCE ELECTROLUMINESCENCE ISONIAZIDUM

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