

研究簡报

“鄰苯二酚—鉄(III)絡合物”一文的补充*

梁 树 权

(中国科学院化学研究所)

在前文^[1]中报告用連續变更濃度法找出两种新的鄰苯二酚—鉄(III)絡合物。其一为藍色阴离子,在 pH 5.9 左右存在,另一为微綠黄色阳离子,在 pH 2 时存在,其鉄与鄰苯二酚基之比分别为 1:3 与 2:1。作为新絡合物而只用一法証明,似乎是还不大够,因此有用其他方法复驗之必要。茲采用克分子比法^[2]用 Unicam S. P. 500 型分光光度計寻找在 pH 5.9 与 2.0 时,不同比例的鉄与鄰苯二酚之光密度值。結果见图 1 及 2。所得結果証实前文所提出的两种新絡合物确系存在。

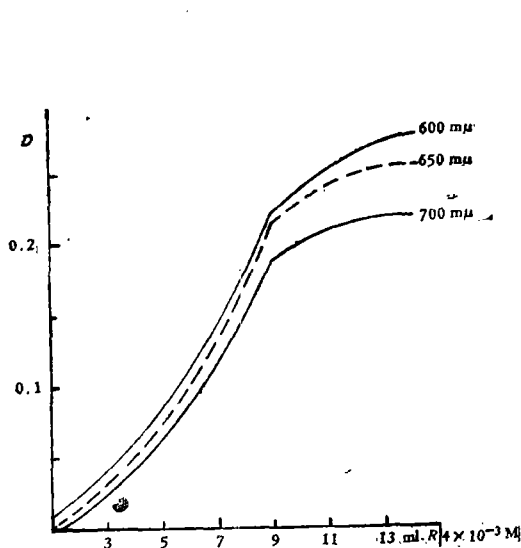


图 1 pH 5.86 时,不同比例的鄰苯二酚和鉄的光密度。Fe³⁺ 3 ml, 4×10^{-3} M

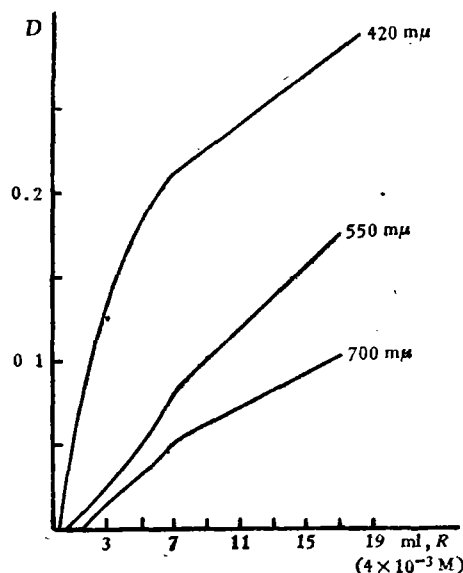


图 2 在 pH 2.0 时,不同比例的鄰苯二酚和鉄的光密度。Fe³⁺ 14 ml, 4×10^{-3} M

* 1958 年七月廿八日收到。前文見化学学报 24, 79 (1958)。

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参 考 文 献

- [1] 梁樹权、陈永兆, 化学学报 **24**, 79 (1958).
[2] J. H. Yoe and A. L. Jones, *Ind. Eng. Chem., Anal. Ed.*, **16**, 111 (1944).

ADDENDUM TO "ON THE PYROCATECHOL-FERRIC COMPLEXES"

LIANG SHU-CHUAN

(*Institute of Chemistry, Academia Sinica*)

ABSTRACT

In a previous communication [*Acta Chimica Sinica*, **24**, 79, 86 (1958)], it is reported that two new pyrocatechol-ferrie complexes have been found by means of Job's continuous variation method. One is blue anion and exists in solutions of pH ca. 5.9; the other is greenish yellow cation and exists in solutions of pH ca. 2; and the ratio of ferrie iron to pyrocatechol is 1:3 and 2:1 respectively. However, it is desirable to prove their existence in solution by some other means. Hence, the molar ratio method is employed for the very purpose. The optical densities of solutions containing different amounts of ferrie iron and pyrocatechol are measured with a spectrophotometer (Unicam S. P. 500) and the results are shown in Fig. 1 and 2 (to be found in the Chinese text on p. 451). Thus, the existence of the two new pyrocatechol-ferrie complexes mentioned above is confirmed.