layer, it seemed desirable to investigate the stability of the Fe^{3+} complex further.

To 10 ml of a solution containing 2.02 mg Fe^{3+} in *N* HCl were added 5 ml 20% sodium acetate, bringing the pH to about 5, then 5 ml $\frac{1}{2}$% *o*-phenanthroline and the mixture bulked to 25 ml and colorimetered at λ508 nm at a succession of times after mixing. The initially yellow solution soon became orange and the absorption at λ508 nm increased, owing to the formation of the ferrous complex; the observed absorbances are plotted in Hey, 1982, fig. 5, except for an additional observation after 72 hours, when the absorbance was 0.692, corresponding to the presence of 93 μg Fe^{2+} ($4\frac{1}{2}$% of the initial ferric content).

Since the reaction involves reduction of Fe^{3+}, something must be oxidized: if this were the phenanthroline or the acetate ion, the reaction would be monomolecular in Fe^{3+} (since both these species are present in large excess); the observation at times up to 200 min fit reasonably to such a reaction, with a half-life of 5 days for the ferric complex (the straight line in Hey, 1982, fig. 5), but the absorbance after 3 days is far less than this would predict. It seems probable that the ferric complex is capable of oxidizing impurities in the solution; in this case, the reaction must stop when all the impurity is oxidized, and an equation of the form $\varepsilon_t = \varepsilon_\infty - (\varepsilon_\infty - \varepsilon_0)e^{-kt}$ (where ε_t is the absorbance at time *t*) should fit the observations. Taking the initial absorbance as 0.162 (corresponding to an absorbance of 0.0021 for the ferric complex at 1 μg cm^{-2} Fe^{3+} and λ508 nm), the final absorbance as 0.702 and k as 0.0035, we calculate the curve shown in Hey, 1982, fig. 5, which extrapolates to 0.702 at 72 hours.

It is clear that the absorbance of the Fe^{3+} complex at λ508 nm is not negligible, amounting to about 1% of that of the Fe^{2+} complex; moreover, breakdown after mixing is fairly rapid, though evidently dependent on the nature and amount of oxidizable substances present, and in $1\frac{1}{2}$ hours after mixing it may have doubled. Thus determination of Fe^{2+} by *o*-phenanthroline may be appreciably in error if much Fe^{3+} is present. Fortunately this does not apply to a determination of Fe^{2+} in silicates by the Riley and Williams (1958) technique: a direct test showed that the Fe^{3+} is complexed adequately by the fluoride present even with excess H_3BO_3 also present, and no Fe^{3+} colour develops.

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International Mineralogical Association: Commission on New Minerals and Mineral Names

A SUMMARY of the principal decisions of the Commission appeared in *Mineral. Mag.* **43,** 1053–5 (1980), and authors are reminded that the names there recommended must be used in papers intended for *Mineral. Mag.* Dr M. Fleischer has drawn attention to a few errors and omissions in this report:

To the list of names recommended by the Commission, add:

Churchite, not weinschenkite
Cryptomelane, not ebelmenite
Greigite, not melnikovite
Matildite, not schapbachite for low-temperature $AgBiS_2$, with schapbachite for the high-temperature polymorph
Psilomelane, not manganomelane for hard unidentified Mn oxides
Pyrolusite, not polianite
Romanechite, not psilomelane for the specific Ba–Mn oxide
Stibarsen, not allemontite for the compound [AsSb]
Titanite, not sphene

To the list of multiple names not considered or not agreed about by the Commission, add (the first will, in each case, be used in *Mineral. Mag.*):

Blödite, bloedite, astrakhanite
Picromerite, schoenite, schönite

The Commission approved (14 to 1) a statement on the relative importance of the holotype material and its original description:

Given that type material of a species exists, and that the original description is not so defective that, in the opinion of the Commission, it bears no reasonable resemblance to the material, the species is to be defined by reference to the type material rather than to the original description.

This vote implies that errors in the original description can be corrected by reference to the type material, and cannot be held to discredit a species unless the original description was, in the words of J. D. Dana (1868) so grossly inaccurate that 'a recognition of the mineral by means of it is impossible'.

The Commission has approved the recommendations of the AIPEA Nomenclature Committee for the naming of regular interstratifications (*Am. Mineral.* **67,** 394-8, 1982) and its application to alliettite, corrensite, kulkeite, rectorite, tarasovite, and tosudite.

The Commission has also approved the discrediting of the following species or names (in addition to those listed in *Mineral. Mag.* **38,** 103 and **43,** 1054):

Badenite (Poni, 1900), is a mixture; a topotype specimen consists of rammelsbergite, nickeline, and bismuth; no other type material could be traced

Epigenite (Sandberger, 1869) is also a mixture; three topotype specimens (all that could be traced) were examined

Kanaekanite (Povarennykh and Dusmatov, 1970); this name was applied to material now shown not to have the ekanite structure and is therefore unsuitable

Kurgantaite (Yarzhemski, 1952) is a mixture of strontian tyretskite and celestine (von Hodenberg and Kühn, *Kali und Steinsalz,* **8,** 206, 1980)

Lavrovite (Koksharov, 1867) is a chromian diopside (*Neues Jahrb. Mineral., Monatsh.* 189, 1979)

Mossite (Brögger, 1897) is a tantalian ferrocolumbite (*Mineral. Mag.* **43,** 553, 1979)

Strontiohilgardite (Braitsch, 1959) is a strontian tyretskite (von Hodenberg and Kühn, *loc. cit.*)

Taprobanite (Gübelin, 1979) is taaffeite

Tarasovite (Lazarenko and Korolev, 1970), an interstratification of mica and smectite, has insufficiently regular lavering to be accepted as a species (*Am. Mineral.* **67,** 396, 1982)

Wilkeite (Eakle and Rogers, 1914) is an unnecessary name for material intermediate between fluorellestadite and apatite

Previous reports on the Commission's findings appear in *Mineral. Mag.* **43,** 1053-5 (1980), **38,** 102-5 (1971), **36,** 1143-5 (1968), **36,** 131-6 (1967), and **33,** 260-3 (1962). Fuller reports, including the votes cast on each species, name, or proposal, appear at irregular intervals in *Bull. Soc. fr. Minéral. Cristallogr.* (now *Bull. Minéral.*), the latest (no. 53) in *Bull. Minéral.* **104,** 694-706 (1981).

A summary also appears in *Zap. vses. min. obshch.* **111,** 335, together with a list of cyrillic and English spellings of minerals described in 1980-1 (Шаховит, named for Ф. Н. Шахов, is, however, improperly transliterated as shahovite).

M. H. Hey

Note. As from 1 January 1983, Dr J. A. Mandarino will be taking over as Chairman of the Commission, and authors of proposed new mineral names should send details to him at: Dept. of Mineralogy and Geology, Royal Ontario Museum, 100 Queen's Park, Toronto, Ontario, Canada M5S 2C6.