

- BERTAUT, E. F. (1953): Contribution à l'étude des structures lacunaires: La pyrrhotine. *Acta Cryst.* **6**, 557-561.
- CARPENTER, R. H. & DESBOROUGH, G. A. (1964): Range in solid solution and structure of naturally occurring troilite and pyrrhotite. *Amer. Mineral.* **49**, 1350-1365.
- CLARK, A. H. (1966): Stability field of monoclinic pyrrhotite. *Trans. Instn. Min. Metall.* **75**, B232-235.
- GRAHAM, A. R. (1969): Quantitative determination of hexagonal and monoclinic pyrrhotites by x-ray diffraction. *Canad. Mineral.* **10**, 4-24.
- TAYLOR, L. A. (1968): A new occurrence of smythite,  $\text{Fe}_3\text{S}_4$  (abstr.). *Program. Ann. Mtg. Geol. Soc. Amer., Mexico City, Nov. 1968, Spec. Paper* **121**, 294-295.

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## SUMMER SCHOOL IN ORE MICROSCOPY

A summer school on modern quantitative methods in ore microscopy was held in the Department of Geology of the University of Toronto from 1st to 5th September. The school was organized jointly by Dr. E. H. Nickel of the Mines Branch of the Department of Energy, Mines and Resources in Ottawa and Professor A. J. Naldrett of the Department of Geology; was sponsored by the Commission on Ore Microscopy of the International Mineralogical Association; and was supported by funds provided by the Mines Branch.

Twenty-eight Canadian scientists drawn from industry, the universities and the federal and provincial governments and coming from as far afield as Labrador and British Columbia were students at the school. They were taught by a team of instructors from Germany, the U.K., the U.S.A. and Canada. Particular emphasis was placed on the theory of reflected light optics and the accurate measurement of spectral reflectivity and micro-indentation hardness. Agents or manufacturers of optical equipment including Walter Carveth Ltd. (E. Leitz), Sargent-Welch Scientific Ltd. (C. Reichert), Vickers Instruments Inc., and Carl Zeiss Ltd. kindly placed their equipment and the services of their technical staffs at the disposal of the school. In this way the students had the opportunity to familiarize themselves with the latest equipment and receive practical instruction from the scientists who, in many cases, had themselves designed the equipment.

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