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If you are not planning to enter the photographic exhibit please pass this information on to someone who may be interested in submitting an entry.

ASTM 1974 PHOTOGRAPHIC EXHIBIT 1916 Race St., Philadelphia, Pa. 19103

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Cover Photo:

This photograph of *Stacking Faults at a Co-TaC Interface* won an Honorable Mention in Electron Transmission in the Photomicrography Section of the 1973 ASTM Photographic Exhibit.

A cobalt base alloy with oriented tantalum carbide fibers was thermally cycled from 250 to 2000°F 500 times. Transmission electron micrograph shows a matrix/fiber interface thinned by ion micro-milling. Faceting of the carbide fibers occurred during the thermal cycling. Stacking faults, parallel to fiber (111) facet planes, were formed in the cobalt matrix adjacent to the carbide fibers. The observed characteristic ion induced defect clusters are a resultant of the ion thinning technique. Original magnification $\times 750,000$.

The photographer was R. R. Russell, General Electric Corporate Research and Development, P.O. Box 8, Bldg. K1, Room 1C22, Schenectady, N.Y. 12301.