

X-ray . . .
our only
business!

Rigaku's Thin Film Diffractometer Attachment

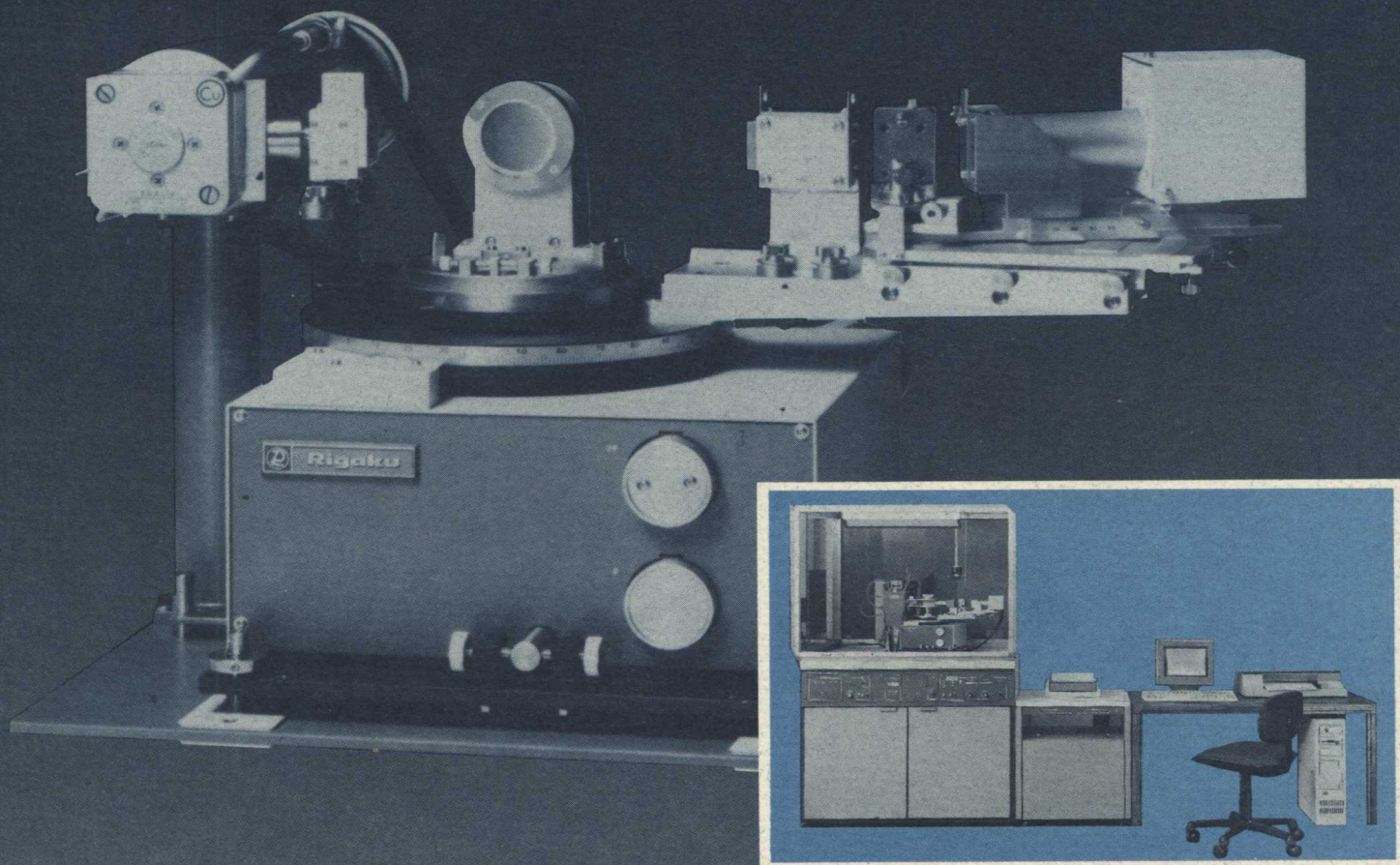
...Throwing light
on 100Å film.

X-ray diffractometry of thin films, which has so far been exceedingly difficult, is now possible with Rigaku's Thin Film Attachment.

Up to now, obtaining a sharp X-ray diffraction profile of a thin film has been a problem; the extremely thin sample weakens the intensity of the diffracted rays, resulting in relatively low signals and high backgrounds. Moreover, since the conventional diffractometer is designed for a θ - 2θ coupled scan, intense diffracted rays from the substrate material overwhelm the diffracted rays from the thin film sample, making it difficult to obtain reliable data.

The dilemma has now been solved by newly developed optics from Rigaku (pat. pend.). Used in conjunction with our wide angle diffractometer, the Thin Film Attachment employs a low-angle incidence method with parallel beam optics that increase the diffraction intensities of thin film samples. A scan system for 2θ alone and an intraplane sample rotation mechanism enhance efficiency. Rigaku has thus made thin film measurement feasible with only the X-ray flux available from a conventional sealed-off X-ray tube.

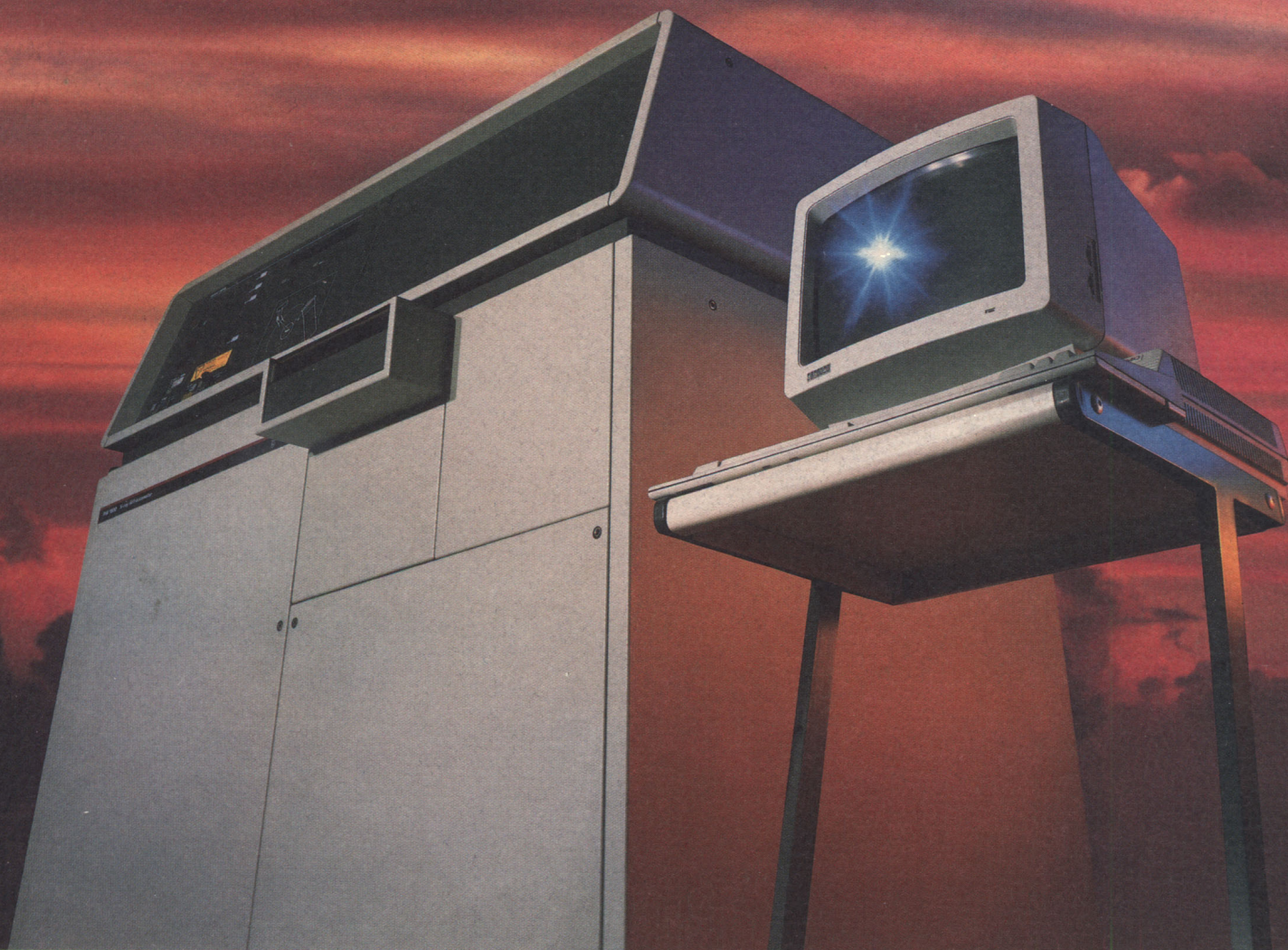
Throwing light on 100Å . . . only Rigaku has the technology to make it happen!



D/Max-B Wide Angle Diffraction System with IBM System/2

Rigaku

From now on all other powder diffractometers will be measured against this one.



It's the new Philips PW1800.

It's the most advanced system of its type available anywhere. It's also the most versatile and the easiest to operate.

It's designed for easy, automatic measurement of a wide range of sample types in a variety of forms and quantities including powders, clays, pastes and filters. Built-in electronics control and supervise all diffractometry functions to assure reliability. What's more, the PW1800 actually monitors itself to see that it is functioning properly. And alerts the operator if it senses trouble ahead. In fact, everything about this new system has been engineered to simplify operation.

Even its appearance underscores its uniqueness. It's totally enclosed, totally integrated to assure complete radiation and contamination protection. Which means it can be installed safely and quickly in the laboratory or on the production line.

And among the things you don't see in this unique system is the newly developed, permanently-aligned goniometer that combines ease of operation with high precision and outstanding analytical performance. Built-in robotics for sample handling. And a new, highly-efficient generator that not only requires less space, but actually reduces power consumption as well.

It's the new Philips PW1800. It's the new standard of the industry. And it's backed by the worldwide support resources of the Philips organization.

For complete details, contact:

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85 McKee Drive, Mahwah, NJ 07430, Tel. (201) 529-3800.

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