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(24) Abstract for Congress, International Union of Crystallography, Montreal, July 10-17, 1957. ~~[20 minutes].~~

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(16) Instrumentation for Diffraction, Micro-optical, Morphological and Dielectric Investigations of Crystals. (10) R. Pepinsky, K. Drenck, H. Diamant, S. Hoshino, and T. Mitsui and F. ~~Jona~~, The Pennsylvania State University.

The following new instruments are described: a miniaturized Weissenberg camera, permitting a focal-spot to film distance of 4.3 cm., for use with our micro-focus x-ray tube; a new Weissenberg for studies at liquid helium temperature; a new heating camera for the Unicam and Supper Weissenbergs; a new heating chamber for powder and single-crystal studies on the G.E. XRD-3 instrument; a new servo-controlled miniaturized x-ray and neutron single-crystal counter goniometer; several new microscope stages for observations at liquid helium and liquid nitrogen temperatures, and a liquid-nitrogen dewar for studies on the Waldmann Chemists' microscope; a new two-circle photoelectric optical goniometer for morphological measurements, which automatically records stereographic projections; a new instrument for single-crystal piezoelectric measurements; new multiple-crystal holders for dielectric measurements at low and high temperatures; a self-balancing bridge and servo-driven recorder for automatic measurement and plotting of dielectric constants versus temperature; a new type of temperature controller and indicator, for use in thermostats at temperatures from -196°C to +500°C, with a control accuracy of $\pm$ 0.05°C; a system for electrode evaporative coating of hydroscopic crystals, for dielectric studies; and a new string saw for oriented crystal cutting.

$1.10

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