J. Appl. Cryst. (1988). **21**, 385

Obituary

Mauritius Renninger

8 June 1905–22 December 1987

Mauritius Renninger died on 22 December at Marburg, Federal Republic of Germany. After studying physics and finishing his thesis in Munich, in 1932 he became an assistant to P. P. Ewald at the Institute of Theoretical Physics of the Technische Hochschule Stuttgart. This was where he first came into contact with the subject on which his scientific interest was focused during the following decades. In 1934 he published his paper *Studien über die Röntgenreflexion an Steinsalz und den Realbau von Steinsalz* (*Z. Kristallogr.* **89**, 344–374). He showed that, in contrast to the hypothesis commonly accepted at that time, crystals of a certain species may either appear as perfect crystals or show a mosaic structure. In 1937 his fundamental publication *Umweganregung, eine bisher unbeachtete Wechselwirkungserscheinung bei Raumgitterinterferenzen* (*Z. Phys.* **106,** 141–176) appeared. The effect described in this paper is familiar to all crystallographers and is commonly called the Renninger effect.

For political reasons, in the same year Renninger left the university and moved to industry where he collaborated with B. Brill and C. Herrmann. In 1946 he became an assistant to C. Hermann at Marburg. In the following years he published a number of papers concerning X-ray interference optics in the perfect crystal, *e.g.* the experimental proof of the Darwin–Ewald–Prins–Kohler curve [*Acta Cryst.* (1955), **8**, 597–606].

In the following years, after his appointment to professor, Renninger's scientific interests were concentrated on X-ray topographic problems. He showed [*Z. Naturforsch. Teil A* (1961), **16**, 1110–1111] that the resolving power of a double-crystal spectrometer can be considerably enlarged by using asymmetric Bragg reflection in a perfect crystal.

The scientific work of M. Renninger comprises about 60 papers. Colleagues and collaborators appreciated him as a constructive and critical partner in discussion as well as a skilful and persistent worker in experiment.

H. Burzlaff
Institut für Angewandte Physik
Lehrstuhl für Kristallographie
Universität
Erlangen
Federal Republic of Germany

P. Buck
Institut für Mineralogie
Universität
Lahnberg
Marburg
Federal Republic of Germany