LETTERS TO THE EDITOR

Contributions of a scientific nature intended for this section should be submitted to the Editor or any of the Co-Editors of Acta Crystallographica *or* Journal of Applied Crystallography.

J. Appl. Cryst. (1993). **26**, 307

The use of alternative filaments for the Rigaku RU 200 X-ray generator

BY RICHARD LEIDICH AND VIRGINIA BERNAL

CABM/Waksman Molecular Biology X-ray Crystallography Facility, Rutgers University, Piscataway, NJ 08855, *USA*

(*Received* 11 *November* 1992; *accepted* 24 *November* 1992)

The active use of the Rigaku RU 200 X-ray generator at the CABM/Waksman X-ray Crystallography Laboratory has resulted in problems that may be alleviated by using an alternative, but equivalent, filament from a supplier different from the company that produces the X-ray generator.

The Rigaku RU 200 X-ray generator requires replacement of the filaments involved, which becomes uneconomical, impractical and inefficient for many laboratories. An alternative distributor has been located, who offers the appropriate filament at a moderate price; a filament that does not harm the generator, has an increased lifetime and improves the research involved.

The filament obtained from Scientific Instrument Services, Inc. (SIS), located in Ringoes, New Jersey, USA, is an alternative to the expensive Rigaku filament. It has been used in the X-ray Crystallography Laboratory at CABM/Rutgers University for more than two years, with great success. Whereas three filaments from Rigaku are priced at over $800, three new filaments may be purchased from SIS for a mere $75. The brackets are sent to SIS and the new filaments are welded on.

More importantly, while the Rigaku filaments last approximately 1200 h, the filaments from SIS have had lifetimes of over 2000 h.

Over the two years that SIS's filaments have been used, this laboratory has not confronted any apparent problems, which extends from the filament itself to the company that produces them. On the contrary, SIS have proven very reliable and of great assistance in all instances.

Furthermore, it has been found that the use of the filament from SIS has proven beneficial to the X-ray generator itself, as less contact with the generator is required, owing the the prolonged lifetime of the alternative filament. As a result, the chances of damage from the perpetual changing of filaments within the generator are decreased and the generator is, therefore, more likely to produce accurate results.

0021-8898/93/020307-01$06.00