

Table 1. *The new results  $10^4 f^2/\mu$  obtained for the samples SC and SJ of the International Powder Intensity Project compared with the results of Jennings for the sample SL*

The range of these values is shown together with the total range in the project. The values in parenthesis refer to the absolute measurements.

1	2	3	4	5	6
<i>hkl</i>	Jennings (1969) SL	Paakkari <i>et al.</i> (1970) SC	Present work SJ	Range %	Total range %
111	6271	6317 (6344)	6324 (6512)	0.8 (3.8)	4.1 (5.9)
200	5905	5841 (5866)	5865 (6040)	1.1 (2.9)	3.2 (5.7)
220	3173	3172 (3186)	3207 (3303)	1.1 (4.0)	3.9 (9.0)
311	2132	2129 (2138)	2114 (2177)	0.8 (2.1)	5.7 (12.2)
222	1880	1870 (1878)	1878 (1934)	0.5 (2.9)	7.2 (11.8)
400	1281	1312 (1318)	1254 (1291)	4.5 (2.8)	9.1 (13.3)

measurements. Owing to this correction, our absolute values (in parenthesis) appeared to be on an average 2.5% higher than those of Jennings (1969) and Paakkari *et al.* (1970). We have not, however, remeasured the intensity of the primary beam. Column 5 gives the range of the results in columns 2–4 and column 6 shows the whole range obtained in the project (excluding SO). In calculating the values in column 6 we have used the normalized values of Jennings's report.

Table 1 shows clearly that the results obtained in three laboratories for the Ni samples SL, SC and SJ are in good agreement, in contradistinction to the general situation. It should be pointed out that although the integrated intensities of each of the first three reflexions for every specimen in the project were originally within 0.5% of each other, the remeasurements of Jennings (*cf.* Paakkari *et al.*, 1969, p. 20) indicated deviations up to 1% between the samples SC and SL. The results of Jennings (sample SL, column 2) have been obtained with an incident-beam monochromator and a wide receiving slit, the results of Paakkari *et al.*

(sample SC, column 3) with an incident-beam monochromator and a narrow receiving slit and, finally, our measurements (column 4) have been performed using a diffracted-beam monochromator and a narrow slit. The polarization factor of the monochromator has been measured by 90 degree scattering (Jennings), by a Bormann crystal (Paakkari *et al.*) and by Miyake's method (this work). Further the TDS corrections have been applied in different ways. Thus the measuring methods are different. We conclude, therefore, that the agreement between these results reflects an accuracy and care of comparable degree in the measurements of these laboratories. We conclude further that the 'magical' level of 1% in accuracy of the powder intensity measurements is attainable, at least on a relative basis.

#### References

- JENNINGS, L. D. (1969). *Acta Cryst.* A25, 217.  
 PAAKKARI, T., SUORTTI, P. & INKINEN, O. (1970). *Ann. Acad. Sci. Fenn. Ser. A VI*, No. 345.

### Notes and News

*Announcements and other items of crystallographic interest will be published under this heading at the discretion of the Editorial Board. The notes (in duplicate) should be sent to the Executive Secretary of the International Union of Crystallography (J. N. King, International Union of Crystallography, 13 White Friars, Chester CH1 1NZ, England).*

#### Sir Lawrence Bragg 1890–1971

Sir Lawrence Bragg, F.R.S., Professor Emeritus and formerly Director of the Royal Institution, died on 1 July 1971. Sir Lawrence, in conjunction with his father Sir William Bragg, carried out the earliest crystal structure determinations by X-ray spectrometry, receiving for this work the Nobel Prize for Physics in 1915. It was as a result of these investigations that it first became possible to obtain absolute values of lattice parameters. Sir Lawrence and his school thereafter developed the quantitative aspects of X-ray diffraction techniques and worked out large numbers of more complicated crystal structures, especially those of silicate minerals. Sir Lawrence took a leading part in the formation of the International Union of Crystallography in 1947, and he became its first President.

A full obituary will be published later.

#### Seminar on Low Energy Electron Diffraction Washington, D. C., U.S.A., 27–28 April 1972

The Sixth LEED Seminar will take place on 27–28 April 1972 in Washington, D.C. The Seminar is a Topical Conference of the American Physical Society, sponsored by the Division of Electron and Atomic Physics. The program will include contributed and invited papers dealing primarily with basic processes and phenomena of LEED. Topics of special interest are: new developments in LEED theory and comparisons with experiment, innovations in experimental technique, and the analysis of data.

Abstracts for contributed papers may be no more than 200 words in length and should conform to the format standards of the Bulletin of the American Physical Society. They should be received not later than 4 February 1972. Abstracts and requests for information should be mailed to: Dr Ray Kaplan, Code 6479, Naval Research Laboratory, Washington, D.C., 20390, U.S.A.