monoclinic b axis. This is a more general requirement than that
indicated by their location along the primary rhombohedral
axis of the undistorted cell shown in Fig. 4. The structure
factor $|F_{\vec{h}}|^2$ in Eq. (4) becomes

$$|F_{\vec{h}}|^2 = A_{\vec{h}}^2 + B_{\vec{h}}^2$$

with

$$A_{\vec{h}} = b_K e^{-B_K/4d_i^2} + \left[b_C \cos 2\pi(hx_C+\ell z_C) + b_N \cos 2\pi(hx_N+\ell z_N)\right] e^{-B_{CN}/4d_i^2}$$

and

$$B_{\vec{h}} = \left[b_C \sin 2\pi(hx_C+\ell z_C) + b_N \sin 2\pi(hx_N+\ell z_N)\right] e^{-B_{CN}/4d_i^2} \qquad (7)$$

In the monoclinic cell $d_{\vec{h}}$ in Eq. (1) becomes[22]

$$d_{\vec{h}} = (1-\cos^2\beta)^{\frac{1}{2}} / \left[h^2/a^2+k^2(1-\cos^2\beta)/b^2+\ell^2/c^2-2h\ell\cos\beta/ac\right]^{\frac{1}{2}}$$

$$(8)$$

All other parameters in Eq. (7) have been previously described.
In the computer fit summarized in Eqs. (1), (4), and (7), the
parameters a, b, c, $\cos\beta$, the lattice parameters for Al_2O_3, u, v,
x_C, z_C, x_N, z_N, B_K, B_{CN}, α, γ, and δ were varied to yield a least
square fitting to the data. This gives ten KCN crystal parameters
using 53 peaks in the monoclinic structure. Most of these
peaks are overlapping pairs or triplets but this analysis technique