

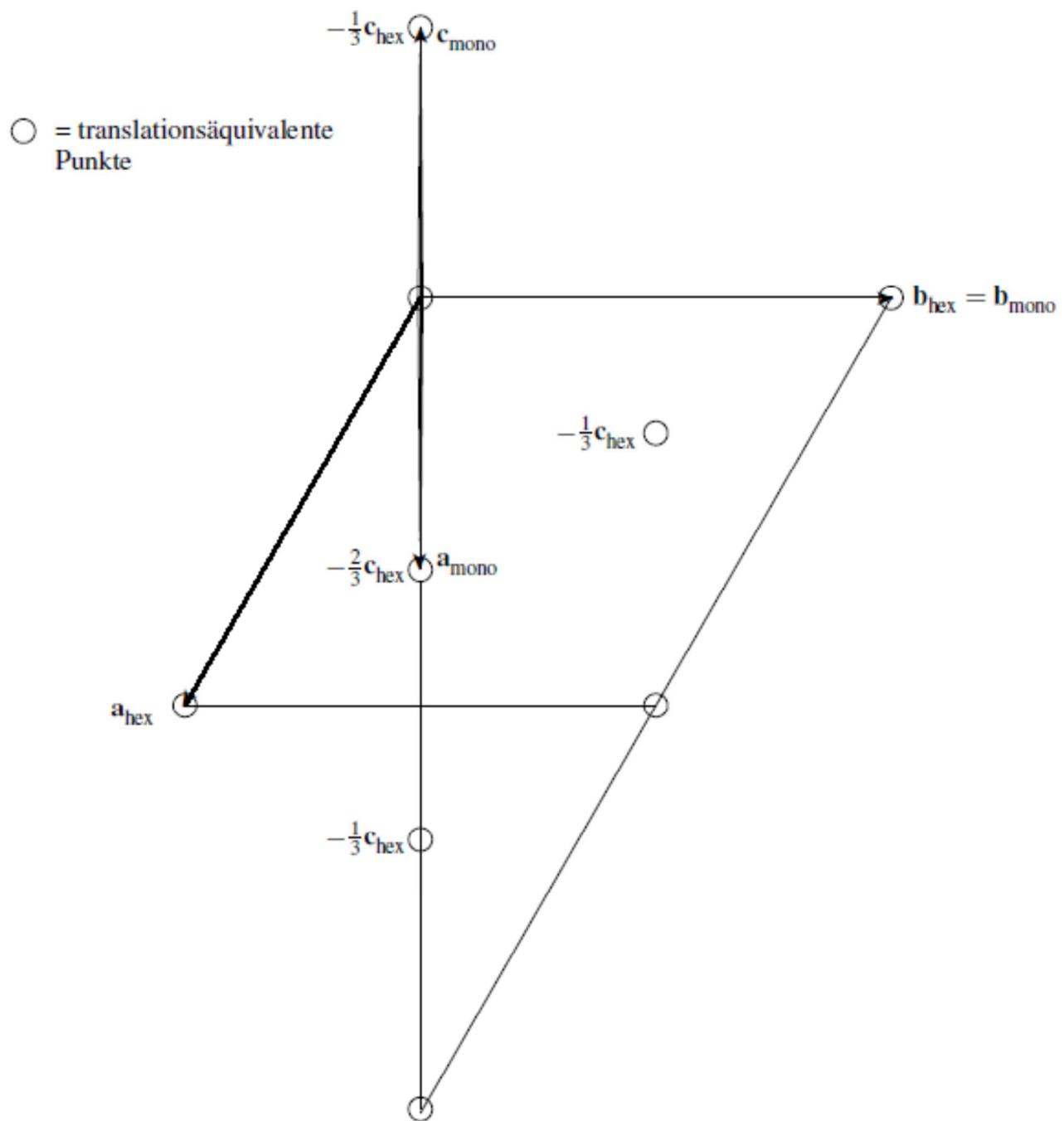
# Formation, Structure, and Frequency-Doubling Effect of a Modification of Strontium Cyanurate ( $\alpha$ -SCY)

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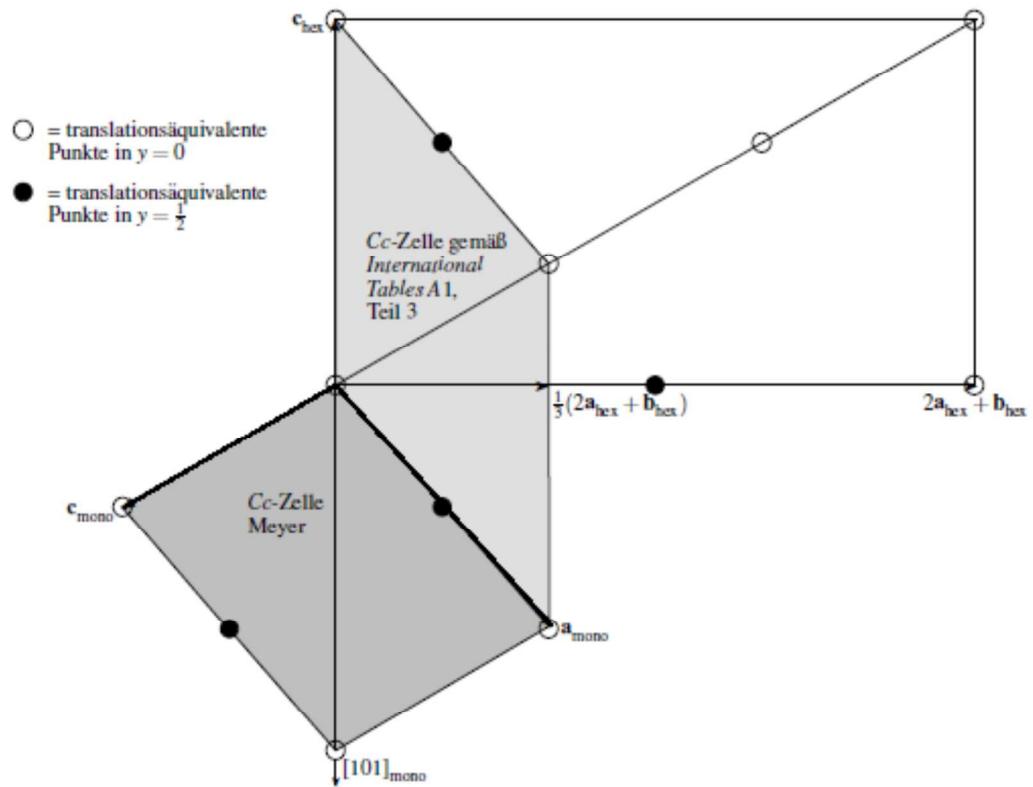
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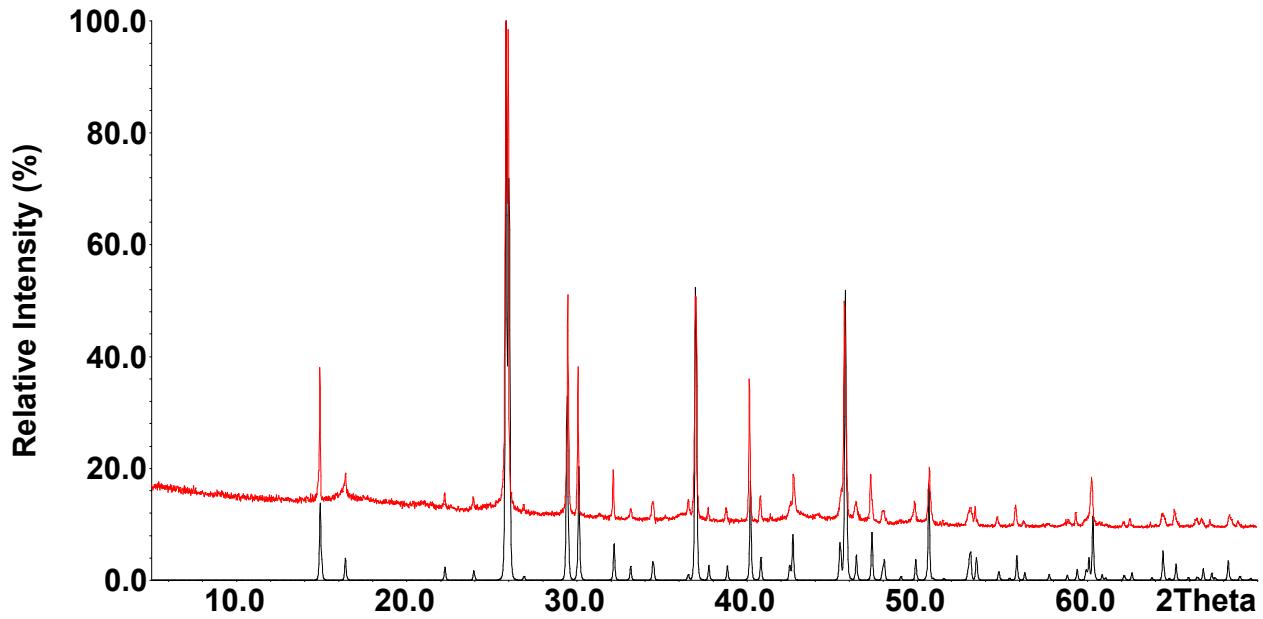
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**Figure S1.** Graphic for unit cell transformation.



**Figure S2.** Geometric relationship between rhombohedral and monoclinic unit cell.



**Figure S3.** Powder diffraction pattern of phase pure  $\beta$ -SCY. Theoretical pattern simulated from crystallographic data (black) and recorded pattern (red).

$$(\mathbf{a}, \mathbf{b}, \mathbf{c})_{Cc} = (\mathbf{a}, \mathbf{b}, \mathbf{c})_{R3c} \begin{pmatrix} \frac{2}{3} & 0 & -\frac{2}{3} \\ \frac{1}{3} & -1 & -\frac{1}{3} \\ -\frac{2}{3} & 0 & -\frac{1}{3} \end{pmatrix}$$

$$\begin{pmatrix} x \\ y \\ z \end{pmatrix}_{Cc} = \begin{pmatrix} \frac{1}{2} & 0 & -1 \\ \frac{1}{2} & -1 & 0 \\ -1 & 0 & -1 \end{pmatrix} \begin{pmatrix} x \\ y \\ z \end{pmatrix}_{R3c} - \begin{pmatrix} 0 \\ \frac{1}{4} \\ 0 \end{pmatrix}$$

**Equation S1 and S2** for the transformation of lattice parameters (top) and atomic coordinates from  $R3c$  to  $Cc$  (bottom).