

**No. 39A-19 K<sub>2</sub>CoI<sub>4</sub>, Potassium tetraiodocobaltate***(M* = 644.75)

|    |   |     |     |  |          |
|----|---|-----|-----|--|----------|
| 1a | Ferroelectricity in K <sub>2</sub> CoI <sub>4</sub> was first reported by Anzai et al. in 1994.                           |     |     |  | 94Anz    |
| b  | phase   | III | II  | I  | 94Anz    |
|    | state   | F   | F   | P  |          |
|    | crystal system  |     |     | monoclinic   |          |
|    | space group   |     |     | P2 <sub>1</sub> /m–C <sub>2h</sub> <sup>2 a)</sup> | a) 77Sei |
|    | Θ [K]   | 170 | 250 |  |          |
|    | ρ <sub>X</sub> = 3.72 · 10 <sup>3</sup> kg m <sup>–3</sup> .  |     |     |  | 77Sei    |
| 2a | Crystal growth: Bridgman method from melt.  |     |     |  | 94Anz    |
| 3a | Unit cell parameters: <i>a</i> = 7.723(5) Å, <i>b</i> = 8.087(4) Å, <i>c</i> = 9.688(2) Å, β = 108.56(6)°, <i>T</i> = RT. |     |     |  | 79Zan    |
| b  | <i>Z</i> = 2 in phase I.  |     |     |  | 79Zan    |
| 5a | Dielectric constant: Fig. 39A-19-001.   |     |     |  |          |
| c  | Spontaneous polarization: Fig. 39A-19-002.  |     |     |  |          |