The cobalt(II) oxidotellurate(IV) hydroxides $Co(TeO_3)(OH)_2$ and $Co_{15}(TeO_3)_{14}(OH)_2$

Authors

Felix Eder, [a] ORCID 0000-0002-5336-4735
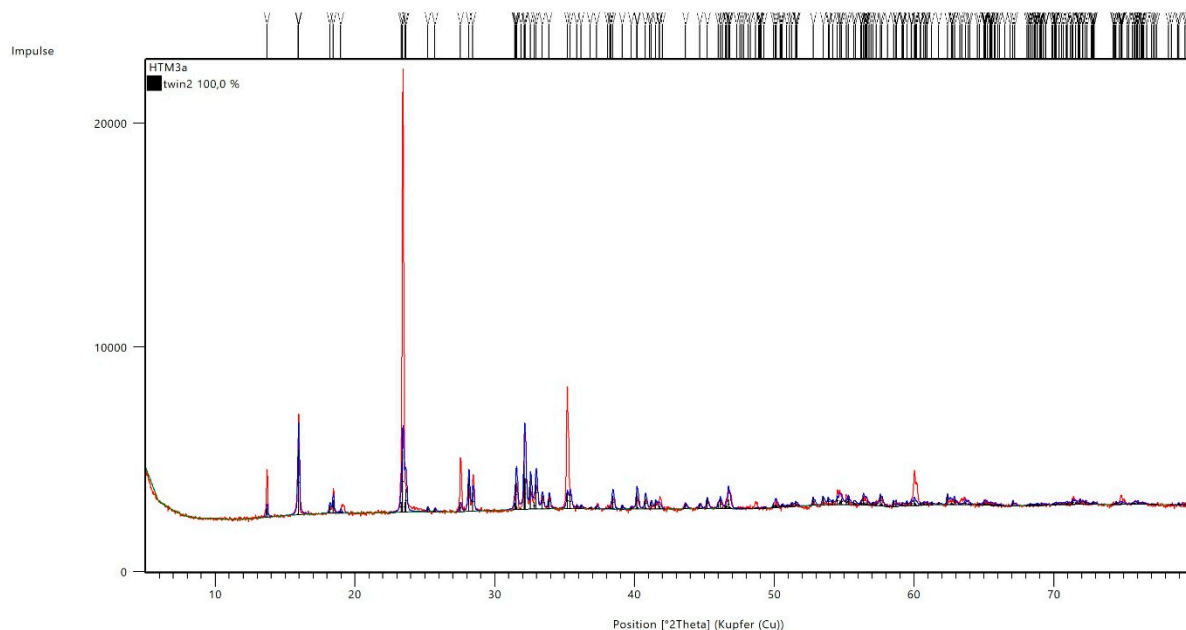
Matthias Weil, [a] ORCID 0000-0001-5235-9910

Prativa Pramanik, [b] ORCID 0000-0002-2026-149X
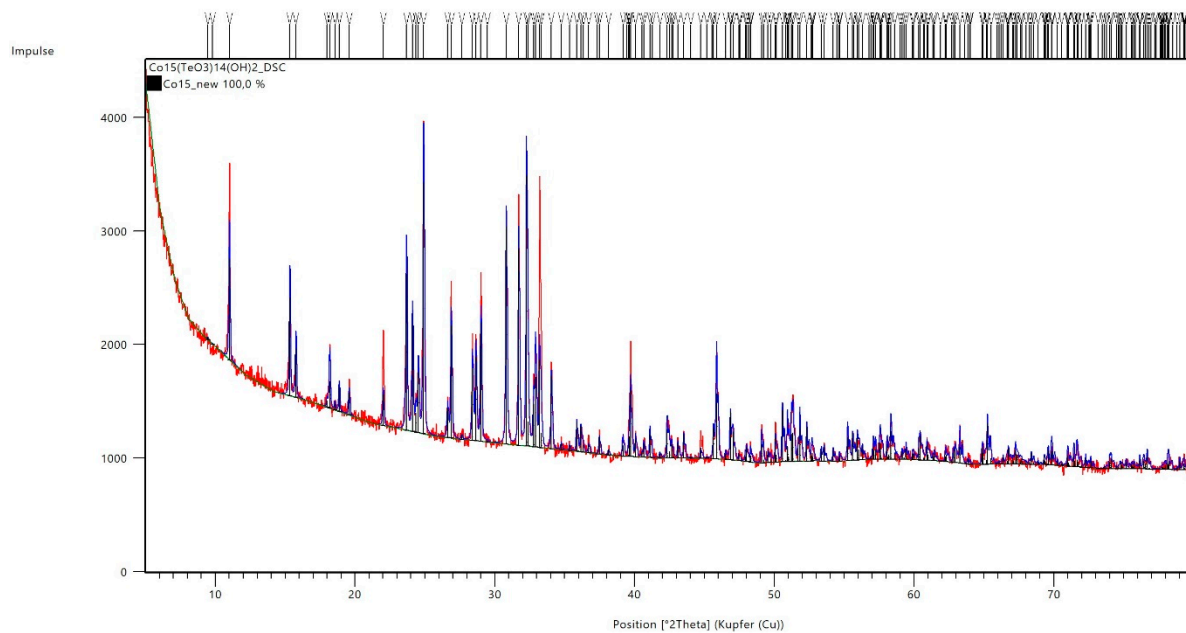
Roland Mathieu, [b] ORCID 0000-0002-5261-2047

a) Institute for Chemical Technologies and Analytics, Division of Structural Chemistry, TU Wien, Getreidemarkt 9/164-5-01, 1060 Vienna / Austria

b) Department of Materials Science and Engineering, Uppsala University, Box 35, 751 03 Uppsala, Sweden

Supplementary material

Supplementary Figure S1. $Co_2(TeO_3)(OH)_2$: measured PXRD data (blue) and simulated PXRD data (red). The difference in measured and simulated intensities is a consequence of the layered character of the crystal structure, with strong texture effects of the (00k) and (01l) reflections. Refined unit-cell parameters on basis of the PXRD measurement are: a = 5.9167(3), b = 5.9540(2), c = 6.8108(3) Å, α = 101.4890(8), β = 100.0592(8), γ = 104.2835(8)°.

Supplementary Figure S2. $Co_{15}(TeO_3)_{14}(OH)_2$ after DSC heat treatment (maximum temperature 580 °C): measured PXRD data (blue) and simulated PXRD data (red). Refined unit-cell parameters on basis of the PXRD measurement are: a = 11.63946(15), c = 27.3534(5) Å.