Mixed Valency in $\text{Yb}_7\text{Co}_4\text{InGe}_{12}$: a Novel Intermetallic Compound Stabilized in Liquid Indium

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- III. The Fourier Transform (FT) of the Yb XAFS for $\text{Yb}_4\text{Co}_7\text{InGe}_{12}$ (15 K) compared with that for Yb_2O_3 (RT). The FT's are not corrected for photo-electron phase shifts. The k-range of the FT was $3\text{-}10 \text{ \AA}^{-1}$.

Table 3. Anisotropic displacement parameters ($\text{\AA}^2 \times 10^3$) for $\text{Dy}_7\text{Co}_4\text{InGe}_{12}$. The anisotropic displacement factor exponent takes the form: $-2\pi^2 [h^2 a^{*2} U^{11} + \dots + 2 h k a^* b^* U^{12}]$

	U^{11}	U^{22}	U^{33}	U^{23}	U^{13}	U^{12}
Dy(1)	7(1)	7(1)	8(1)	0	0	1(1)
Dy(2)	7(1)	7(1)	8(1)	0	0	0
Dy(3)	7(1)	9(1)	8(1)	0	0	0(1)
Ge(1)	8(1)	5(1)	9(1)	0	0	-1(1)
Ge(2)	5(1)	6(1)	19(1)	0	0	0(1)
Ge(3)	11(1)	15(1)	7(1)	0	0	-6(1)
Co	6(1)	8(1)	7(1)	0	0	-2(1)
In	6(1)	6(1)	11(1)	0	0	0

Table 6. Anisotropic displacement parameters ($\text{\AA}^2 \times 10^3$) for $\text{Ho}_7\text{Co}_4\text{InGe}_{12}$. The anisotropic displacement factor exponent takes the form: $-2\pi^2 [h^2 a^{*2} U^{11} + \dots + 2 h k a^* b^* U^{12}]$

	U^{11}	U^{22}	U^{33}	U^{23}	U^{13}	U^{12}
Ho(1)	8(1)	8(1)	7(1)	0	0	2(1)
Ho(2)	8(1)	8(1)	9(1)	0	0	0
Ho(3)	9(1)	11(1)	9(1)	0	0	-1(1)
Ge(1)	10(1)	9(1)	10(1)	0	0	-1(1)
Ge(2)	10(1)	9(1)	22(2)	0	0	3(1)
Ge(3)	25(2)	17(1)	9(1)	0	0	12(1)
Co	8(1)	9(1)	8(2)	0	0	-3(1)
In	8(1)	8(1)	11(2)	0	0	0

Table 9. Anisotropic displacement parameters ($\text{\AA}^2 \times 10^3$) for $\text{Yb}_7\text{Co}_4\text{InGe}_{12}$. The anisotropic displacement factor exponent takes the form: $-2\pi^2 [h^2 a^{*2} U^{11} + \dots + 2 h k a^* b^* U^{12}]$

	U^{11}	U^{22}	U^{33}	U^{23}	U^{13}	U^{12}
Yb(1)	3(1)	3(1)	10(1)	0	0	1(1)
Yb(2)	3(1)	3(1)	10(1)	0	0	0
Yb(3)	4(1)	6(1)	11(1)	0	0	0(1)
Ge(1)	4(1)	1(1)	11(1)	0	0	1(1)
Ge(2)	5(1)	3(1)	26(1)	0	0	0(1)
Ge(3)	12(1)	6(1)	10(1)	0	0	-6(1)
Co	2(1)	3(1)	10(1)	0	0	-1(1)
In	4(1)	4(1)	14(1)	0	0	0

XAFS : Yb₇Co₄InGe₁₂ & Yb₂O₃