

TABLE 31

Expt. 44. Ac, 10; Cr, 10; KI, 20; Ox, 0; Fe, 1.0; V, 700;
Temp. 39.7° C

θ	2	4	8	16
As	0.30	1.10	1.35	2.25

TABLE 32

Expt. 45. Ac, 20; Cr, 10; KI, 20; Ox, 0; Fe, 1.0; V, 700;
Temp. 39.7° C

θ	0.5	1	2
As	1.40	2.15	2.70

TABLE 33

Ac, 15; Cr, 20; KI, 20; Ox, 5; Fe, 1.0; V, 700

θ	0.5	1	2
As, 30.2° (Expt. 46)	0.55	1.15	2.00
As, 0° (Table 5)	3.00	4.60	6.00

TABLE 34

Ac, 20; Cr, 20; KI, 20; Ox, 5; Fe, 1.0; V, 700.

θ	0.25	0.5	1	2	4
As, 30.2° (Expt. 47)	—	1.35	2.25	3.40	4.30
As, 0° (Table 5)	4.05	5.75	7.15	8.00	—
Blank (30.2°); $\theta = 4$, As = 0					

TABLE 35 (Expt. 48)

In the mixture Ac = 20, Cr = 10, Ox = 5, Fe = 1.0, V = 700, at 0°, after half a minute, 0.78 cc of the ferrons salt remained unoxidized (Table 19).

In the same mixture at 30.2°, the amount of ferrons sulphate remaining after half a minute caused the liberation (in four minutes) of iodine equivalent to As = 1.15, when KI = 20 was added, and water enough to bring the total volume up to 800 cc.

But in the mixture Ac = 20, Cr = 10, KI = 20, Ox = 5, Fe = 0.75, V = 800, for $\theta = 4$, As = 1.70. Consequently, less than 0.75 cc of FeSO₄ must have remained unoxidized after half a minute in the previous experiment (See Jour. Phys. Chem. 7, 1 (1903)).