

Bisamidoximes: Synthesis and Complexation with Iron (III)**Accessory Publication**

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Accessory Materials

Table 1S. Data from Job's Method of continuous variation for amidoxime **3d** and iron (III); total concentration of 0.0020 M in DMF ($\lambda = 520$ nm).

Mole fraction	A
0.00	0.000

0.10	0.235
0.20	0.387
0.30	0.505
0.40	0.558
0.50	0.568
0.60	0.548
0.70	0.489
0.80	0.411
0.90	0.299
1.00	0.000

Figure 1S. Job's plot for 3d and iron (III) total concentration of 0.0020 M in DMF at 520 nm.

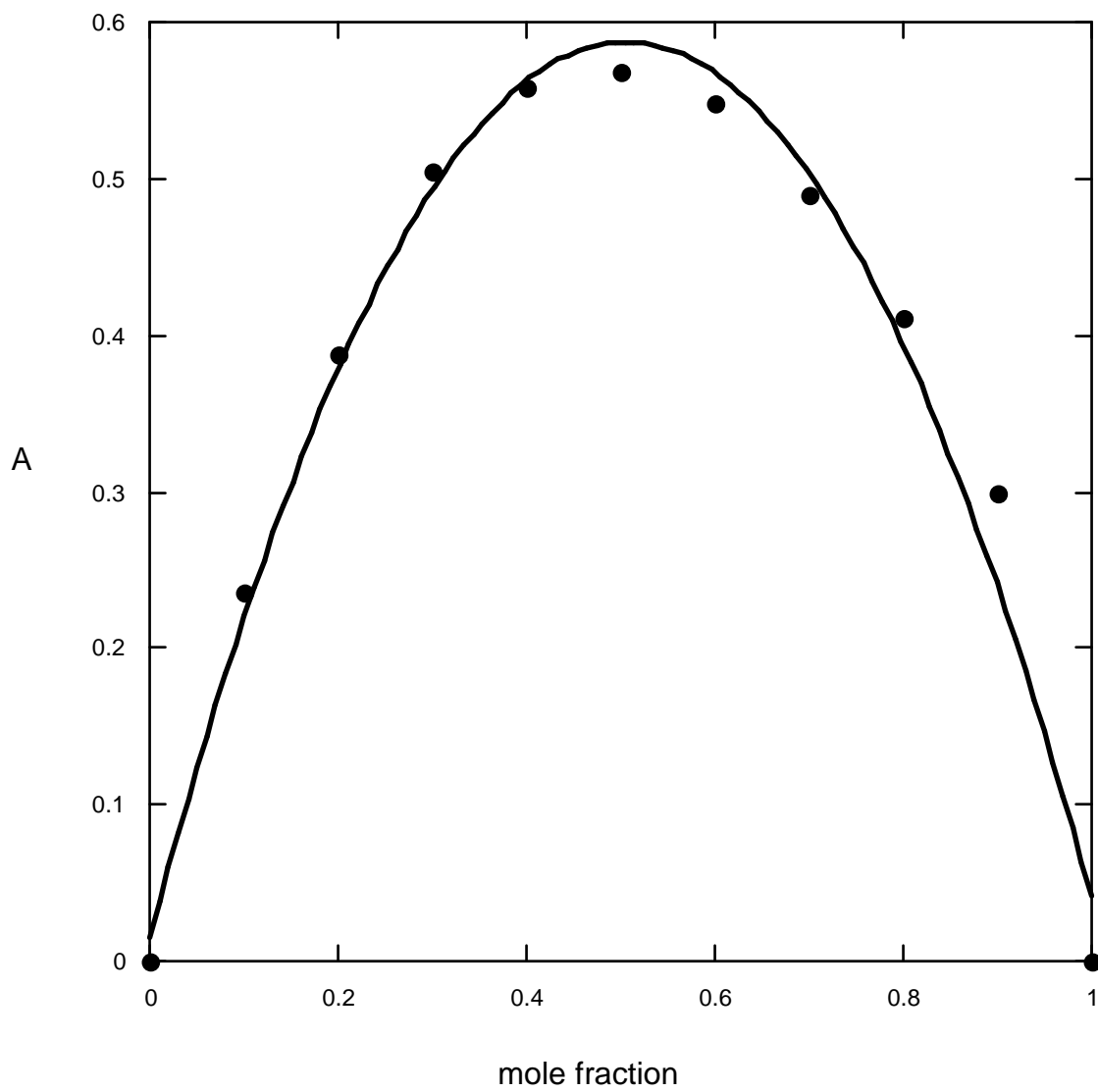


Table 2S. Data from Job's Method of continuous variation for amidoxime **3d** and iron (III); total concentration of 0.0004 M in DMF ($\lambda = 520$ nm).

Mole fraction	A
0.00	0.000
0.10	0.280
0.20	0.597
0.30	0.863
0.40	1.043
0.50	1.062
0.60	1.042
0.70	0.892
0.80	0.692
0.90	0.492
1.00	0.000

Figure 2S. Job's plot for 3d and iron (III); total concentration of 0.0040 M in DMF at 520 nm.

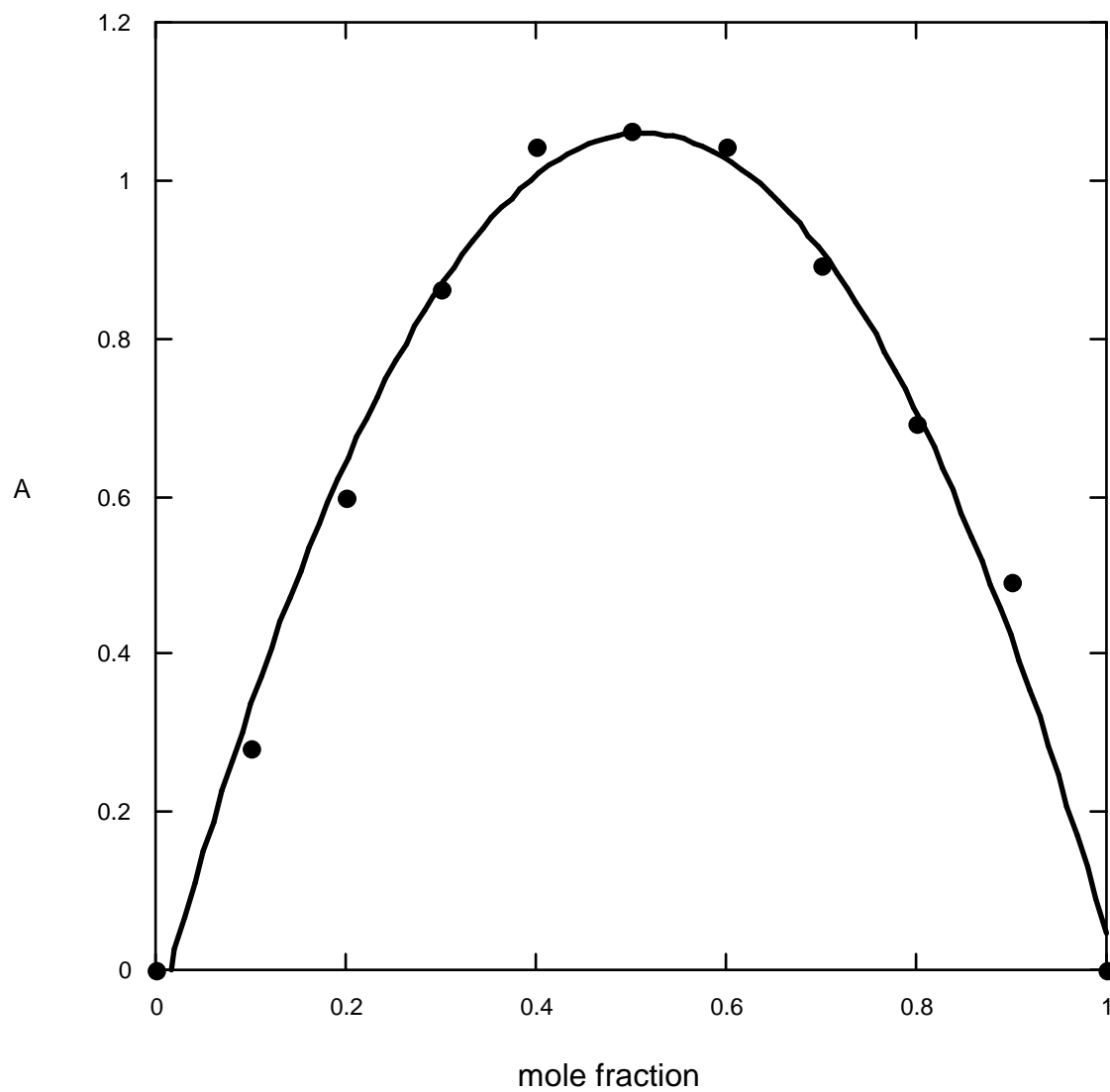


Table 3S. Data from Job's Method of continuous variation for amidoxime **3e** and iron (III); total concentration of 0.00080 M in DMF ($\lambda = 500$ nm).

Mole fraction	A
0.00	0.000
0.10	0.298
0.20	0.537
0.30	0.664
0.40	0.792
0.50	0.823
0.60	0.835
0.70	0.807
0.80	0.634
0.90	0.353
1.00	0.000

Figure 3S. Job's plot for 3e and iron (III); total concentration of 0.00080 M in DMF at 500 nm.

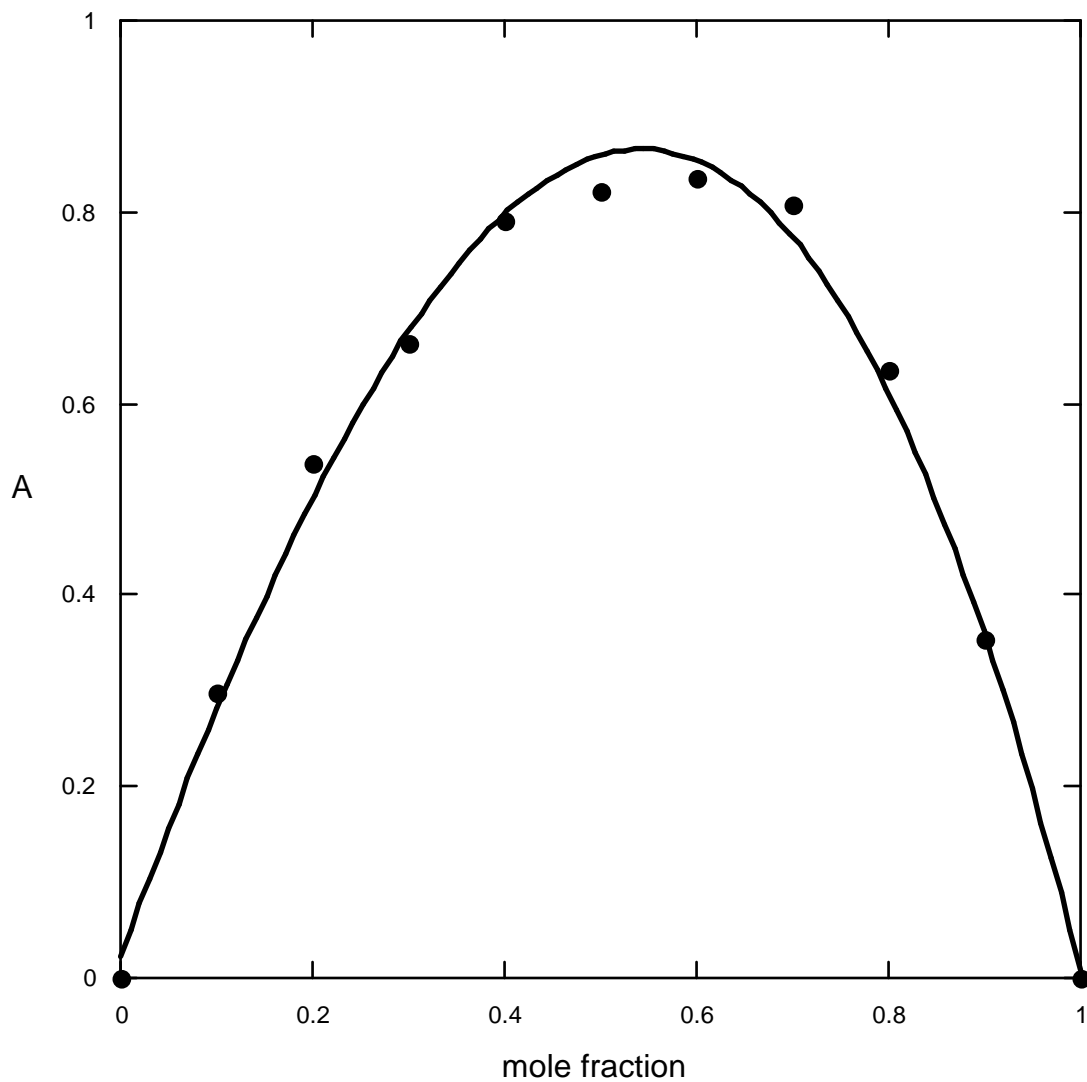


Table 4S. Data from Job's Method of continuous variation for amidoxime **3e** and iron (III); total concentration of 0.0016 M in DMF ($\lambda = 500$ nm).

Mole fraction	A
0.00	0.000
0.10	0.523
0.20	0.770
0.30	1.023
0.40	1.265
0.50	1.367
0.60	1.415
0.70	1.405
0.80	1.278
0.90	0.694
1.00	0.000

Figure 4S. Job's plot for 3e and iron (III); total concentration of 0.0016 M in DMF at 500 nm.

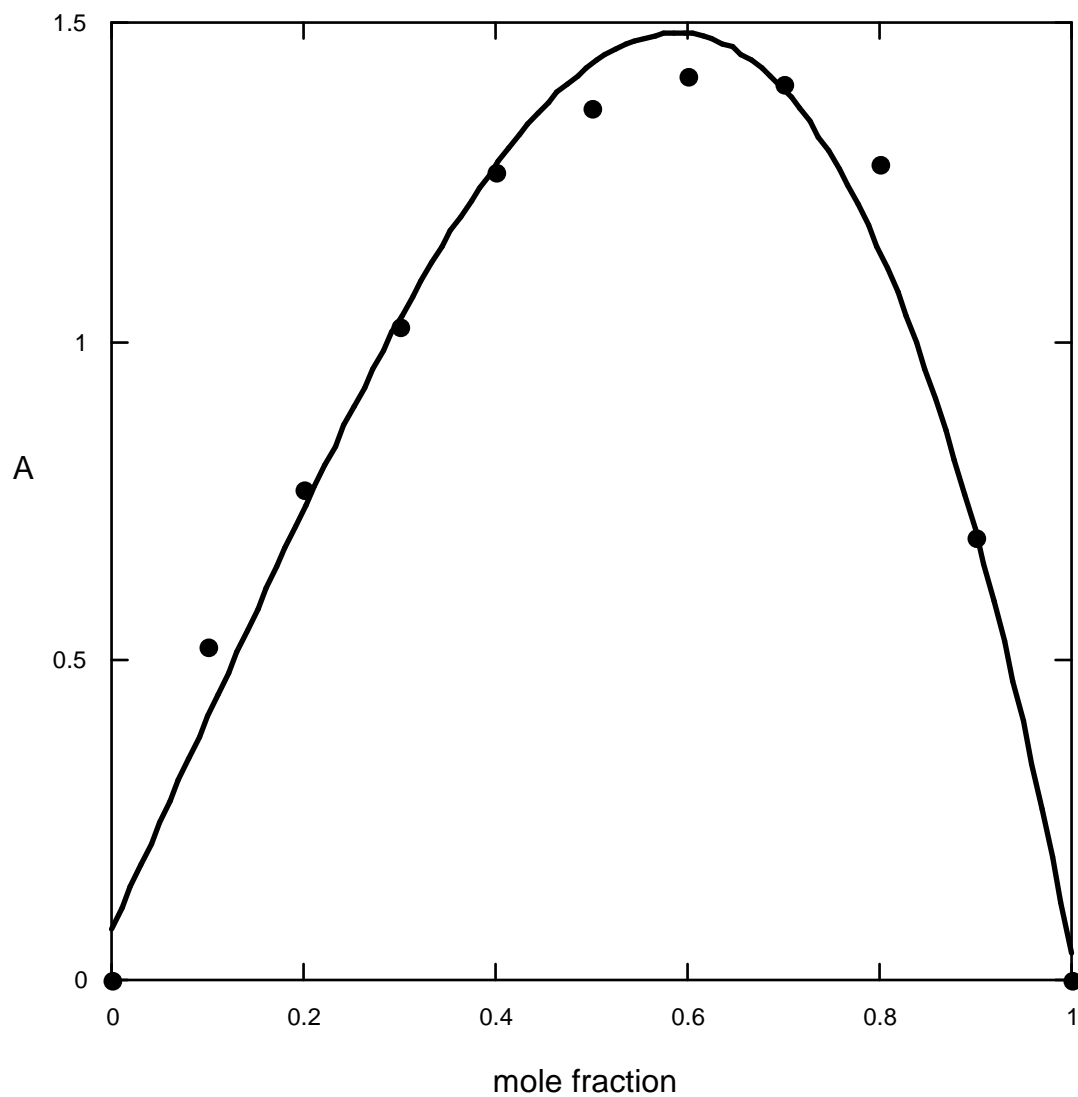


Table 5S. Data from Job's Method of continuous variation for amidoxime **3f** and iron (III); total concentration of 0.00080 M in DMF ($\lambda = 525$ nm).

Mole fraction	A
0.00	0.000
0.10	0.376
0.20	0.597
0.30	0.696
0.40	0.715
0.50	0.702
0.60	0.655
0.70	0.523
0.80	0.446
0.90	0.319
1.00	0.000

Figure 5S. Job's plot for 3f and iron (III); total concentration of 0.00080 M in DMF at 525 nm.

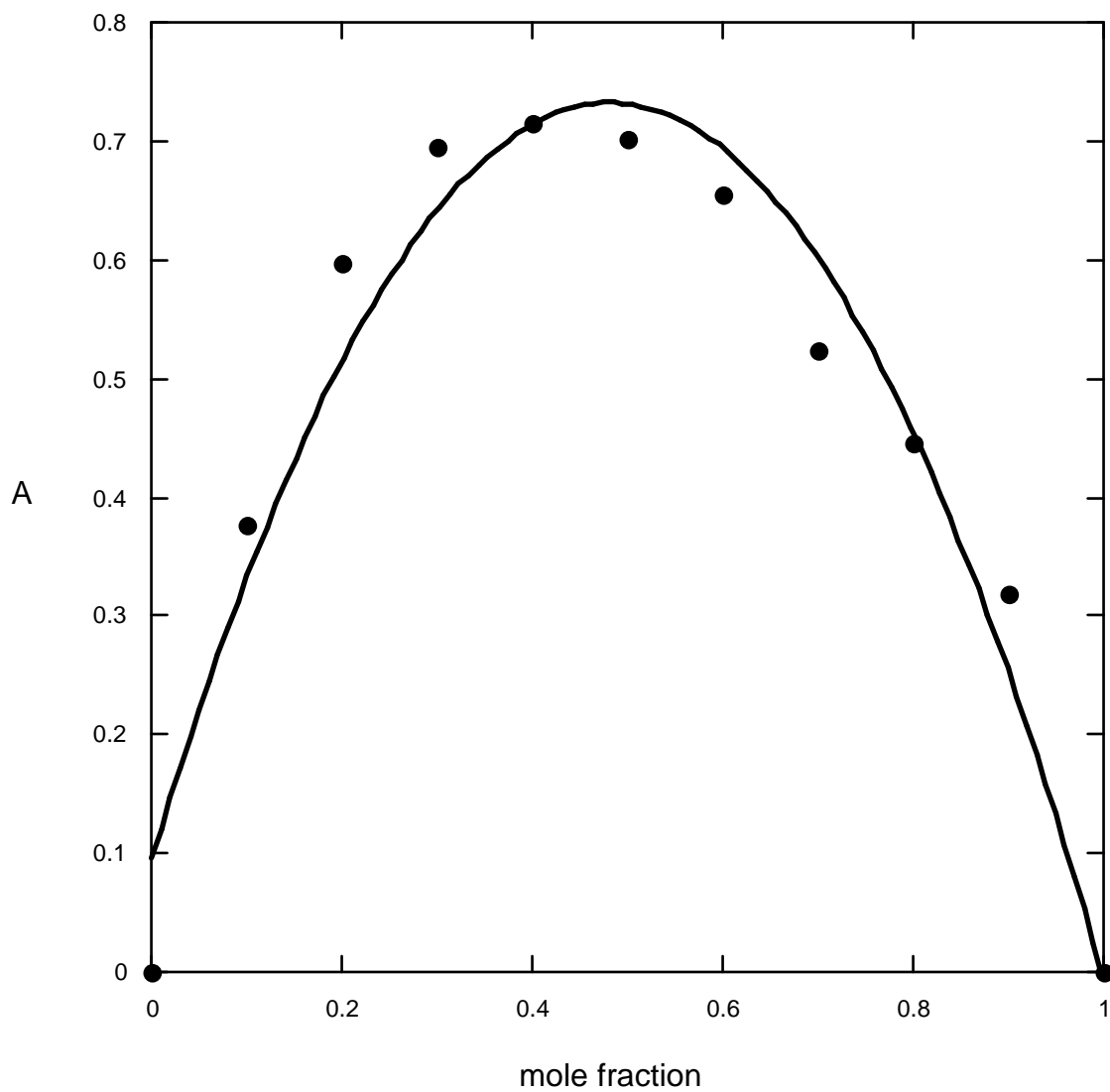


Table 6S. Data from Job's Method of continuous variation for amidoxime **3f** and iron (III); total concentration of 0.0020 M in DMF ($\lambda = 525$ nm).

Mole fraction	A
0.00	0.000
0.10	0.567
0.20	0.870
0.30	1.137
0.40	1.305
0.50	1.344
0.60	1.258
0.70	1.130
0.80	0.958
0.90	0.708
1.00	0.000

Figure 6S. Job's plot for 3f and iron (III); total concentration of 0.0020 M in DMF at 525nm.

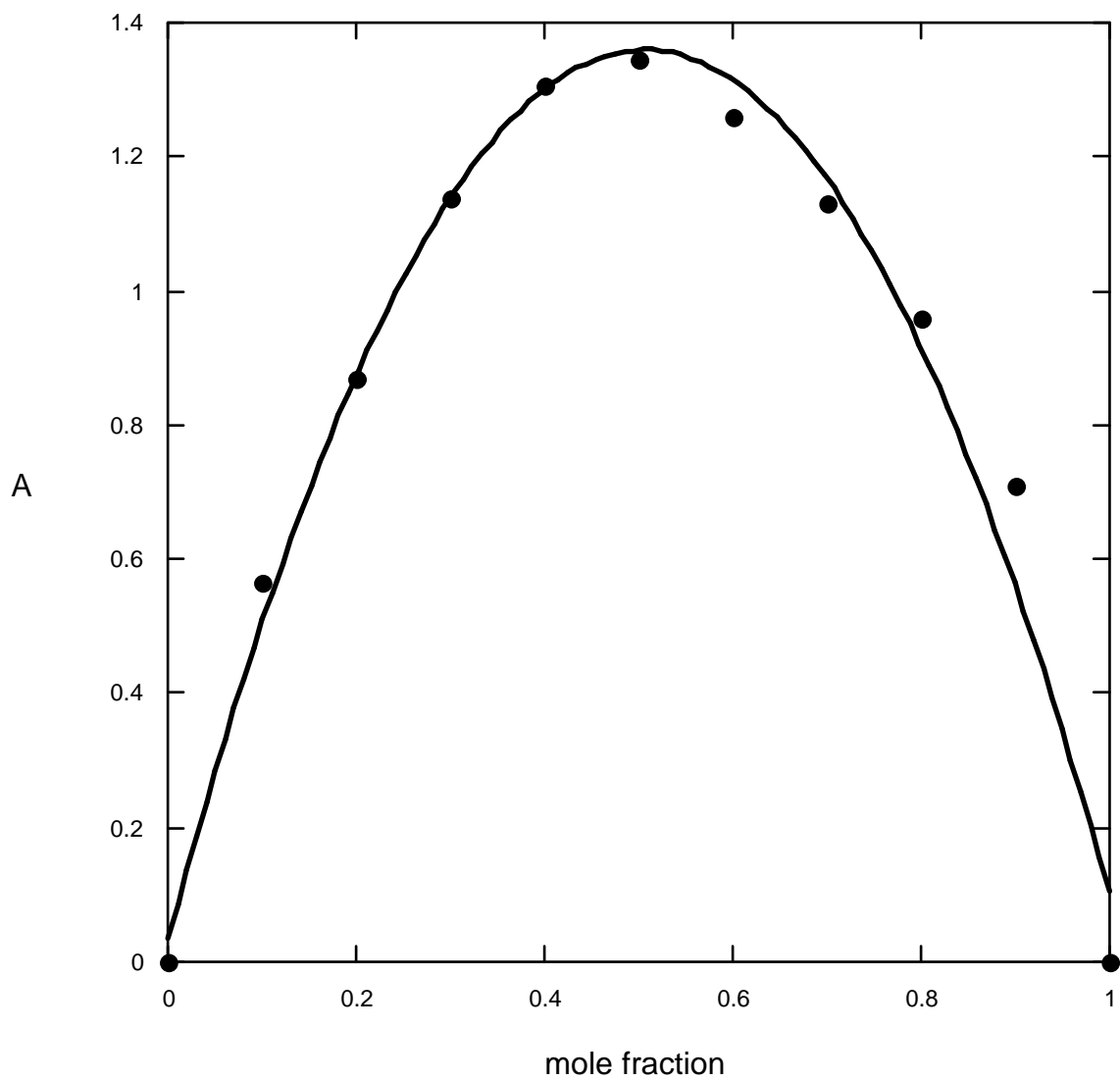


Table 7S. Data from Job's Method of continuous variation for amidoxime **3g** and iron (III); total concentration of 0.00080M in DMF ($\lambda = 550$ nm).

Mole fraction	A
0.00	0.000
0.10	0.256
0.20	0.472
0.30	0.639
0.40	0.804
0.60	0.971
0.70	0.872
0.80	0.614
0.90	0.311
1.00	0.000

Figure 7S. Job's plot for 3g and iron (III); total concentration of 0.00080 M in DMF at 550 nm.

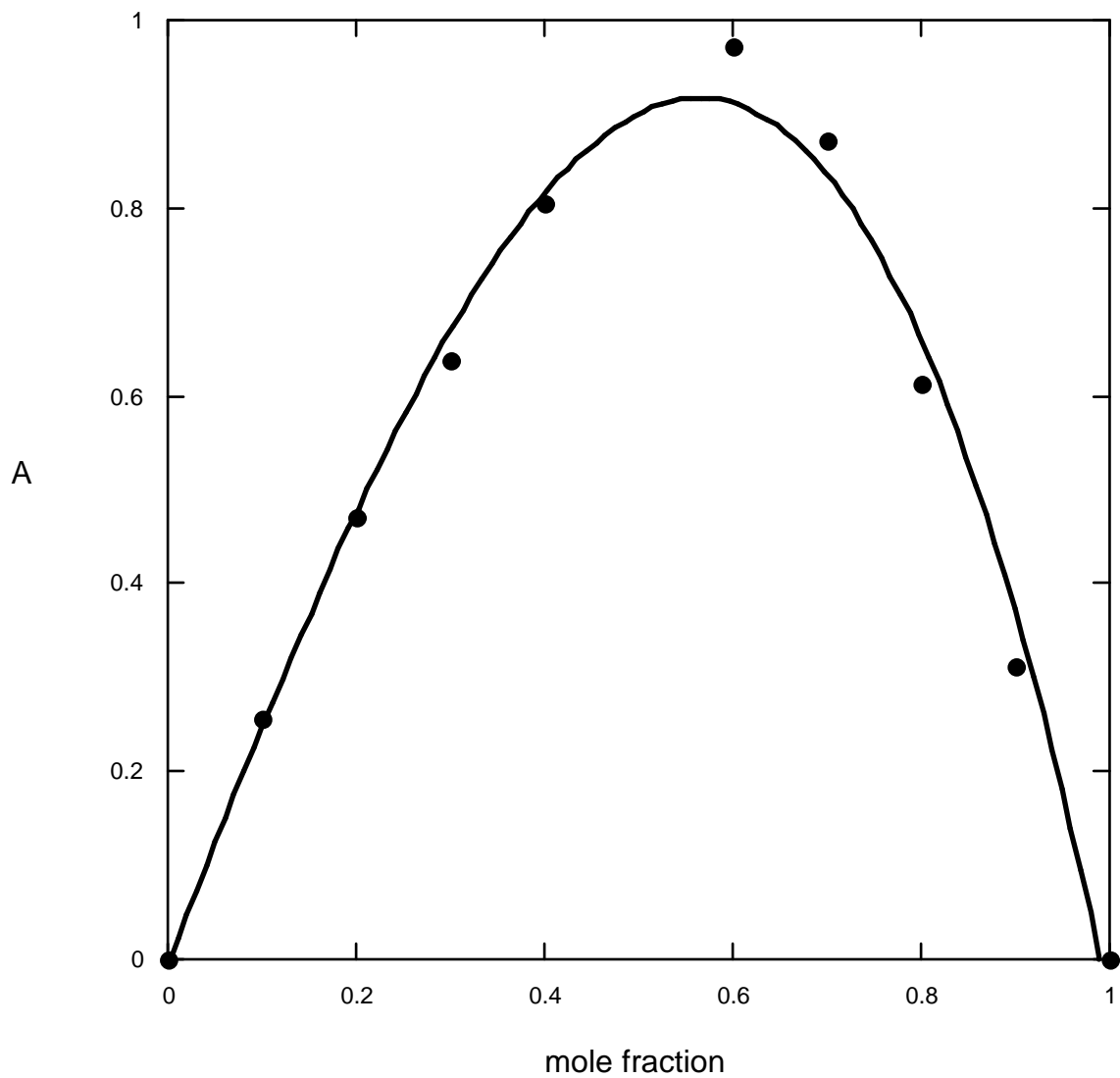


Table 8S. Data from Job's Method of continuous variation for amidoxime **3g** and iron (III); total concentration of 0.0020 M in DMF ($\lambda = 550$ nm).

Mole fraction	A
0.00	0.000
0.10	0.382
0.20	0.701
0.30	0.892
0.40	1.015
0.50	1.103
0.60	1.121
0.70	0.995
0.80	0.712
0.90	0.380
1.00	0.000

Figure 8S. Job's plot for 3g and iron (III); total concentration of 0.0020 M in DMF at 550 nm.

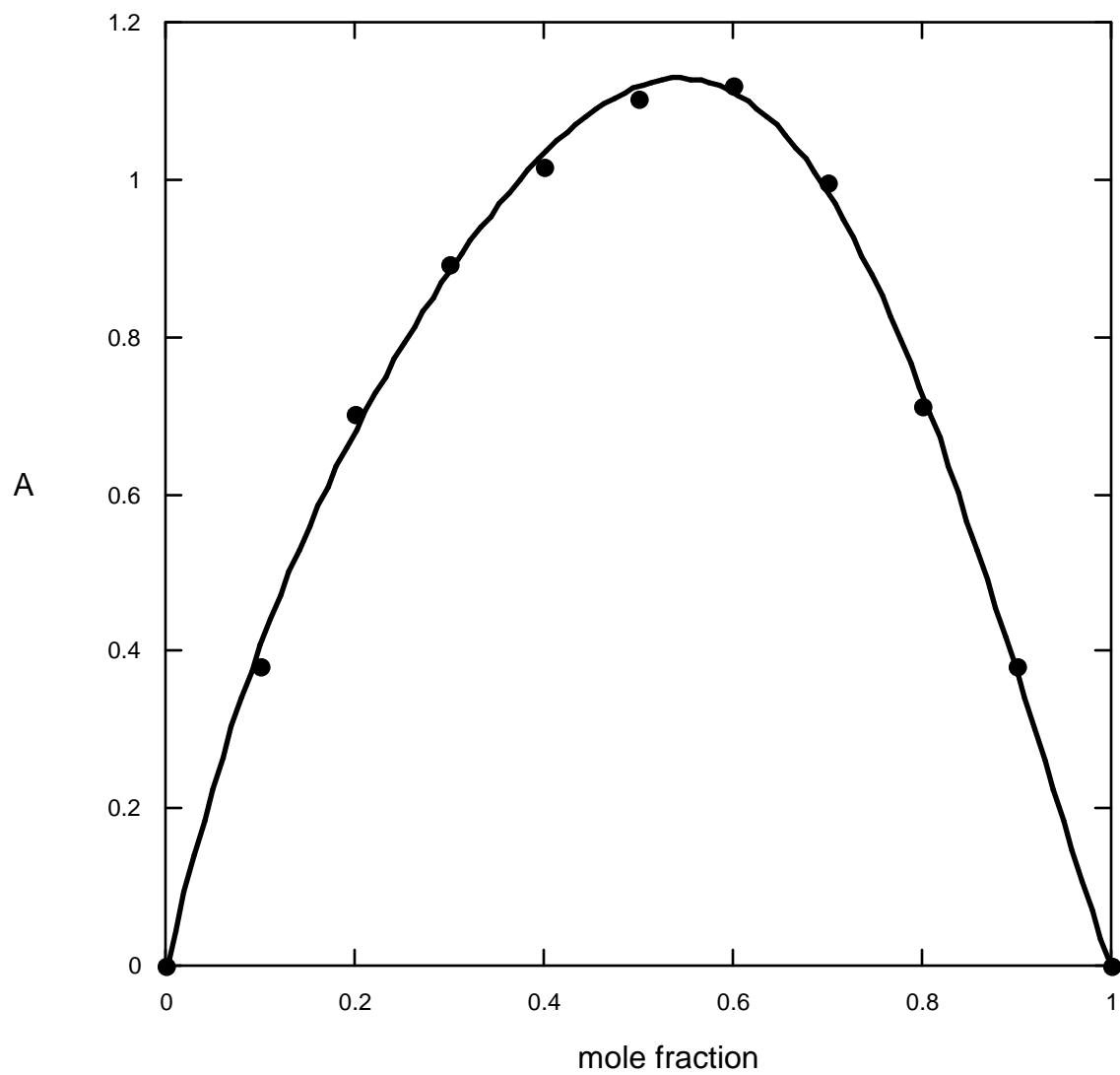


Table 9S. Data from Job's Method of continuous variation for amidoxime **5** and iron (III); total concentration of 0.00080 M in DMF ($\lambda = 540$ nm).

Mole fraction	A
0.00	0.000
0.10	0.299
0.20	0.550
0.30	0.765
0.40	0.909
0.50	0.999
0.60	0.872
0.70	0.655
0.80	0.325
0.90	0.220
1.00	0.000

Figure 9S. Job's Plot for 5 and iron (III); total concentration of 0.00080 M in DMF at 540 nm.

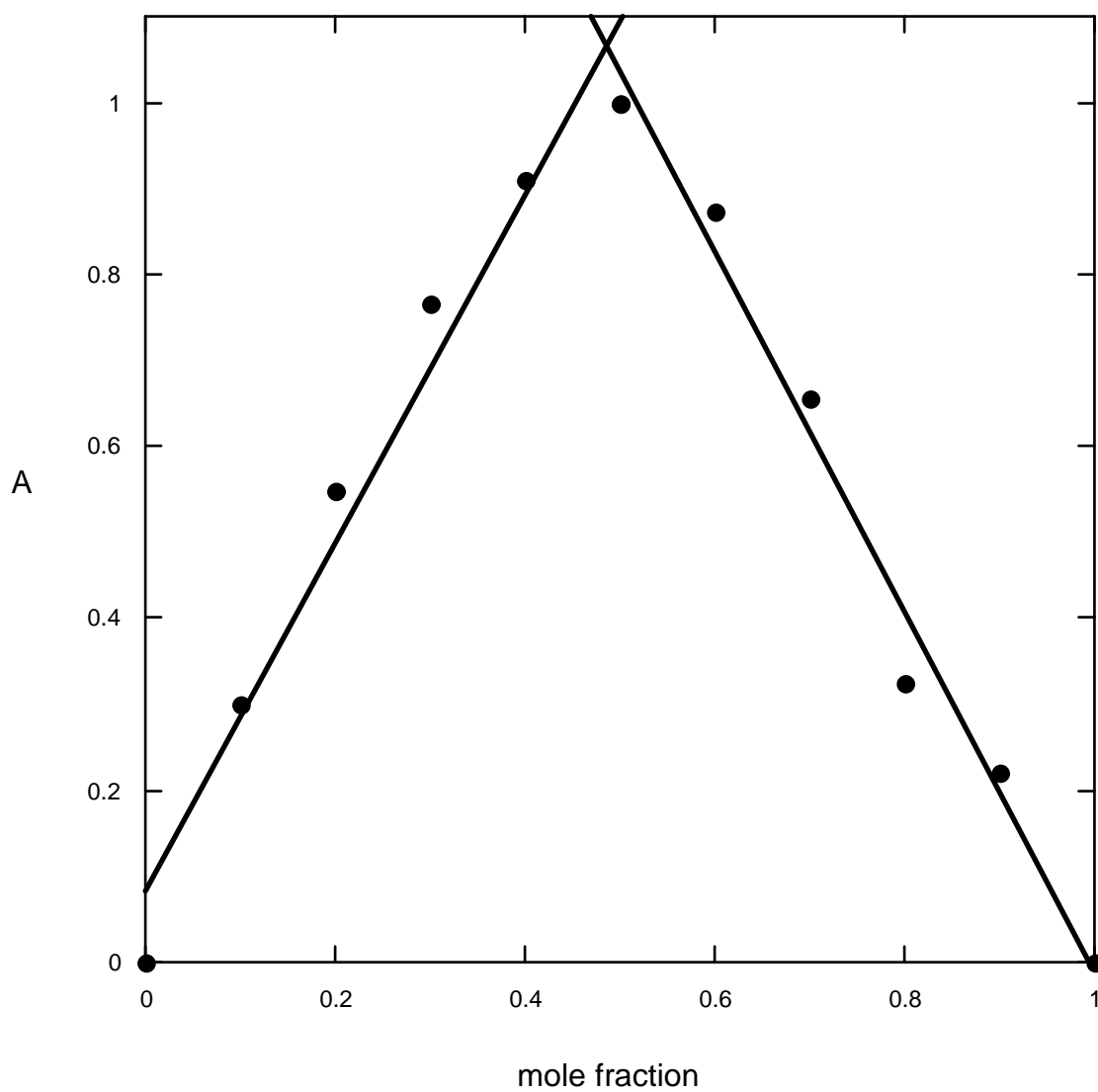


Table 10S. Data from Job's Method of continuous variation for amidoxime **5** and iron (III); total concentration of 0.0020 M in DMF ($\lambda = 540$ nm).

Mole fraction	A
0.00	0.000
0.10	0.362
0.20	0.648
0.30	0.878
0.40	1.075
0.50	1.205
0.60	1.060
0.70	0,721
0.80	0.573
0.90	0.313
1.00	0.000

Figure 10S. Job's plot for 5 and iron (III); total concentration of 0.0020 M in DMF at 540 nm.

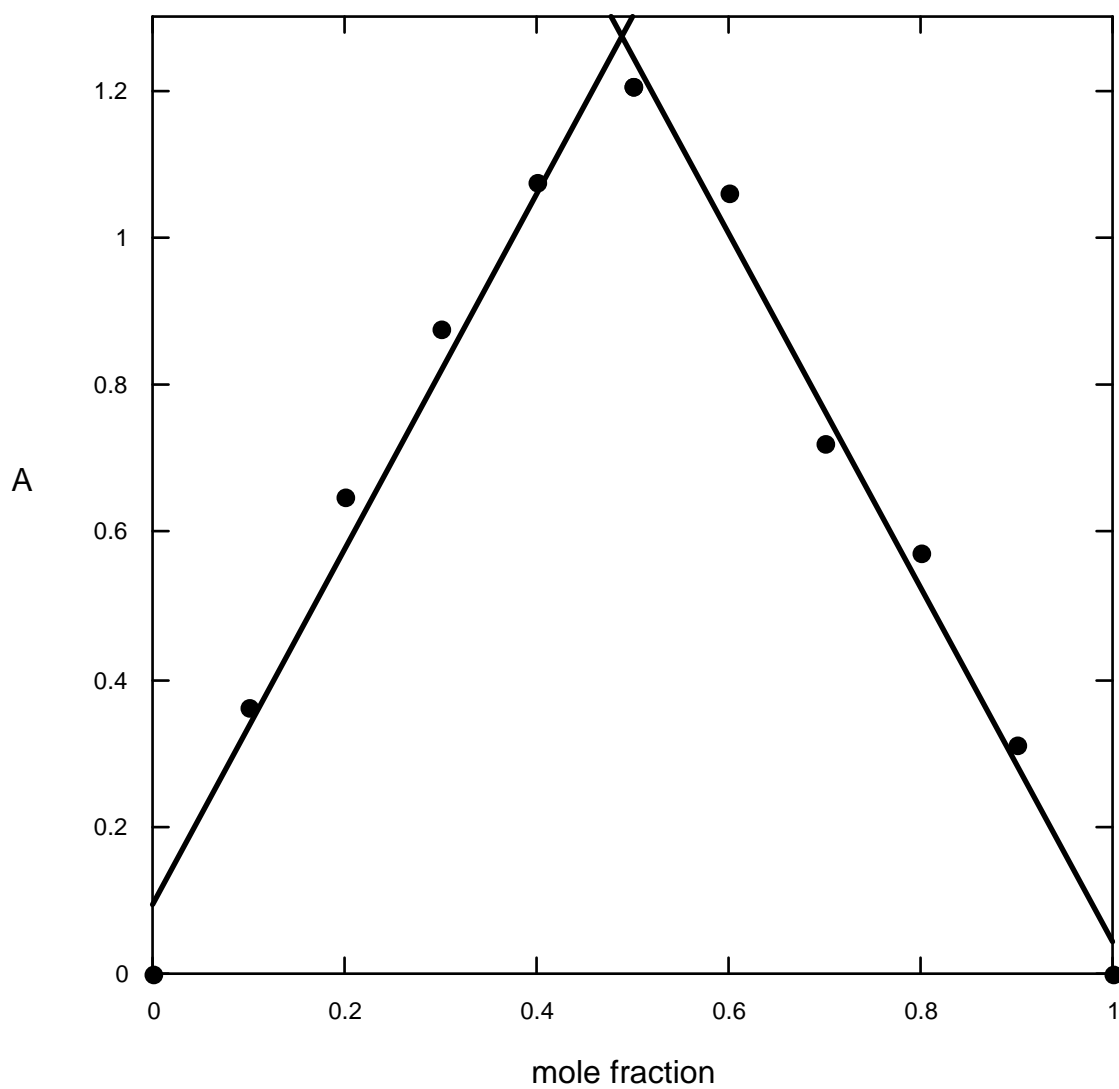


Table 11S. Data from Job's Method of continuous variation for amidoxime **6** and iron (III); total concentration of 0.00160 M in DMF ($\lambda = 465$ nm).

Mole fraction	A
0.00	0.000
0.30	0.849
0.40	1.234
0.50	1.562
0.60	1.878
0.70	1.732
0.80	1.164
0.90	0.583
1.00	0.000

Figure 11S. Job's plot for 6 and iron (III); total concentration of 0.00160 M in DMF at 465 nm.

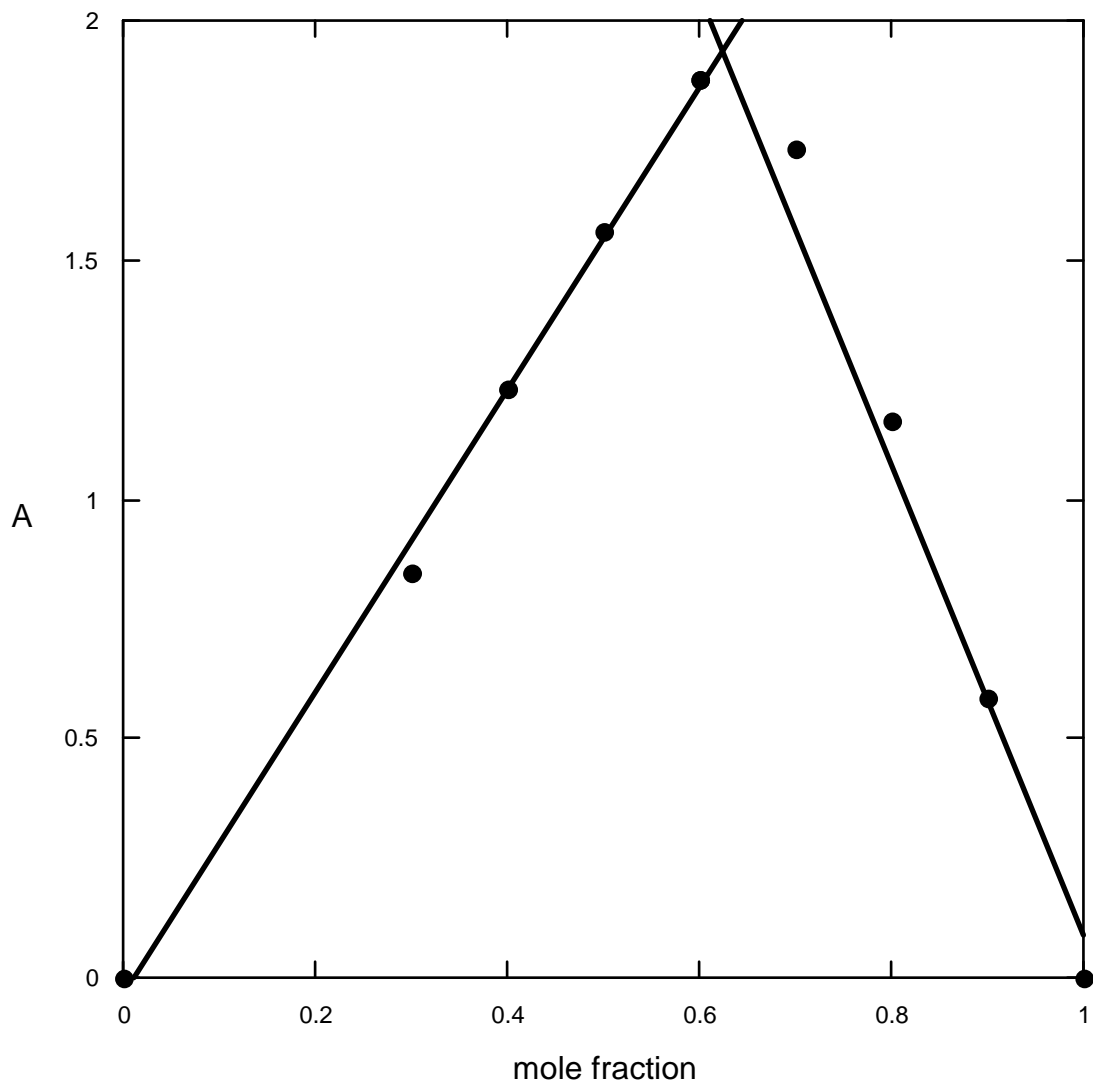


Table 12S. Data from Job's Method of continuous variation for amidoxime **7** and iron (III); total concentration of 0.0020 M in DMF ($\lambda = 533$ nm).

Mole fraction	A
0.00	0.000
0.10	0.047
0.20	0.112
0.30	0.112
0.40	0.209
0.50	0.251
0.60	0.271
0.70	0.301
0.80	0.282
0.90	0.233
1.00	0.000

Figure 12S. Job's plot for 7 and iron (III); total concentration of 0.0020 M in DMF at 533 nm.

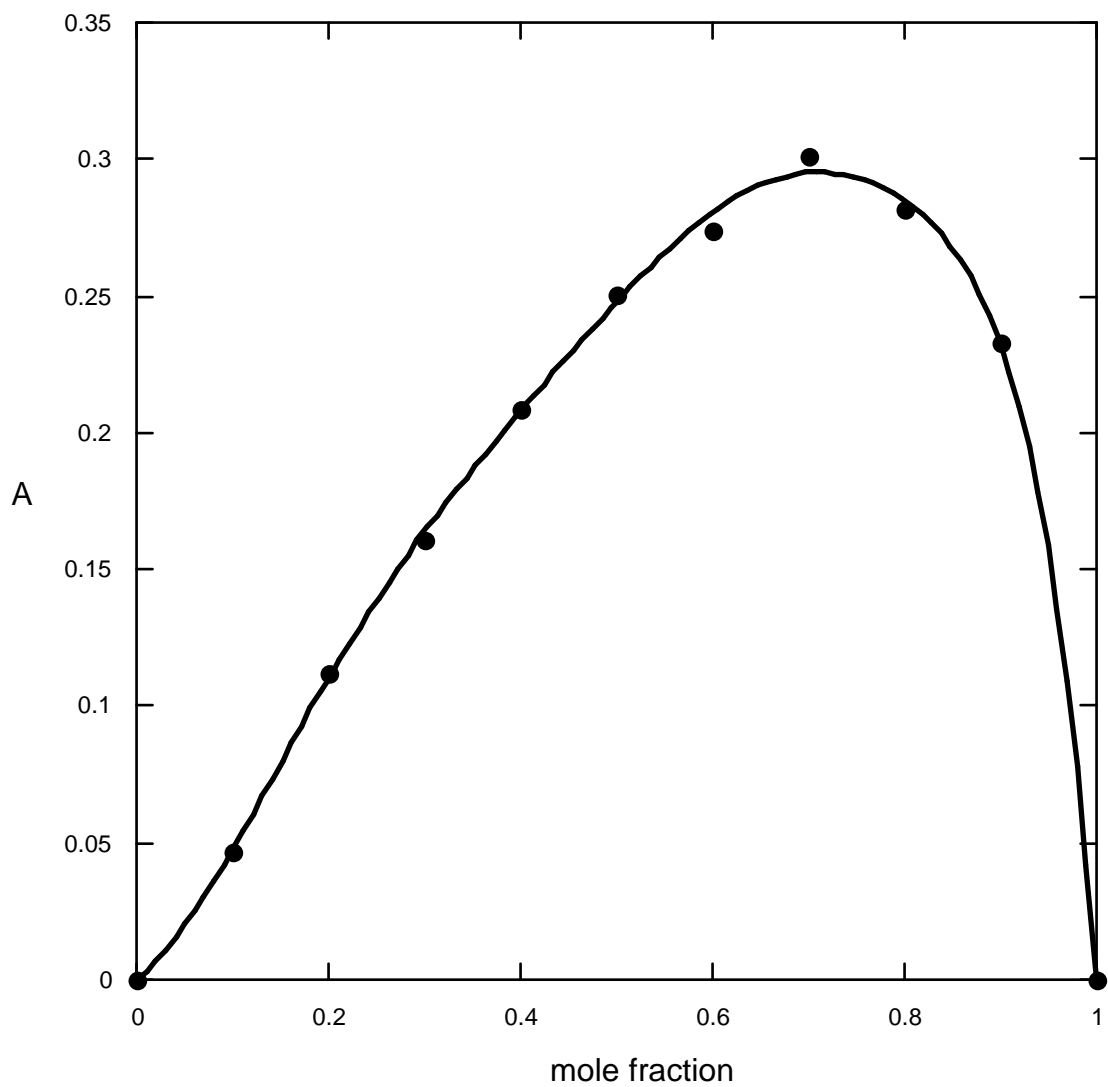


Table 13S. Data from Job's Method of continuous variation for amidoxime **7** and iron (III); total concentration of 0.0040 M in DMF ($\lambda = 533$ nm).

Mole fraction	A
0.00	0.000
0.10	0.144
0.20	0.283
0.30	0.393
0.40	0.560
0.50	0.651
0.60	0.677
0.70	0.660
0.80	0.590
0.90	0.425
1.00	0.000

Figure 13S. Job's plot for 7 and iron (III); total concentration of 0.0040 M in DMF at 533 nm.

