

Freezing Points

Mass	NaCl	LiF	HCl	Mass	MgCl2	C12H22O11
0.1000	-0.06	-0.15	-0.10	0.1000	-0.06	-0.01
1.0000	-0.64	-1.46	-1.02	1.0000	-0.59	-0.05
2.0000	-1.27	-2.92	-2.04	2.0000	-1.17	-0.11
3.0000	-1.91	-4.38	-3.06	3.0000	-1.76	-0.16
4.0000	-2.55	-5.84	-4.08	4.0000	-2.34	-0.22
5.0000	-3.18	-7.30	-5.10	5.0000	-2.93	-0.27

Boiling Points

Mass	NaCl	LiF	HCl	Mass	MgCl2	C12H22O11
0.1000	100.02	100.04	100.03	0.1000	100.02	100.00
1.0000	100.18	100.40	100.28	1.0000	100.16	100.01
2.0000	100.35	100.80	100.56	2.0000	100.32	100.03
3.0000	100.53	101.21	100.84	3.0000	100.48	100.04
4.0000	100.70	101.61	101.12	4.0000	100.65	100.06
5.0000	100.88	102.01	101.40	5.0000	100.81	100.07

Molarity

Mass	NaCl	LiF	HCl	MgCl2	C12H22O11
0.1000	0.02	0.04	0.03	0.01	0.00
1.0000	0.17	0.39	0.27	0.11	0.03
2.0000	0.34	0.78	0.55	0.21	0.06
3.0000	0.51	1.18	0.82	0.32	0.09
4.0000	0.68	1.57	1.10	0.42	0.12
5.0000	0.86	1.96	1.37	0.53	0.15

NaCl

Mass	molality	Tf	Tb
0.1000	0.02	-0.06	100.02
1.0000	0.17	-0.64	100.18
2.0000	0.34	-1.27	100.35
3.0000	0.51	-1.91	100.53
4.0000	0.68	-2.55	100.70
5.0000	0.86	-3.18	100.88

LiF

Mass	molality	Tf	Tb
0.1000	0.04	-0.15	100.04
1.0000	0.39	-1.46	100.40
2.0000	0.78	-2.92	100.80
3.0000	1.18	-4.38	101.21
4.0000	1.57	-5.84	101.61
5.0000	1.96	-7.30	102.01

HCl

Mass	molality	Tf	Tb
0.1000	0.03	-0.10	100.03
1.0000	0.27	-1.02	100.28
2.0000	0.55	-2.04	100.56
3.0000	0.82	-3.06	100.84
4.0000	1.10	-4.08	101.12
5.0000	1.37	-5.10	101.40

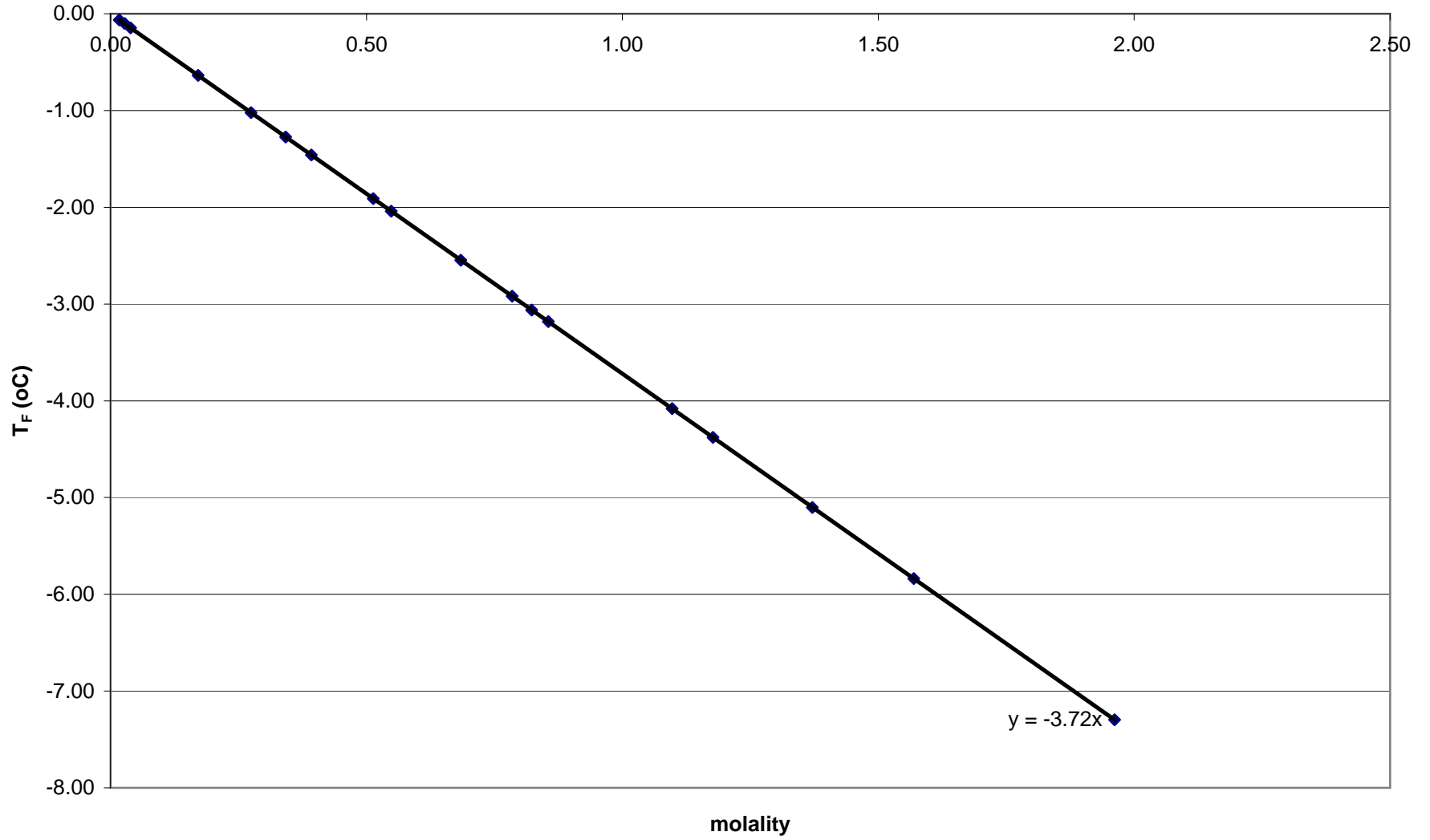
MgCl2

Mass	molality	Tf	Tb
0.1000	0.01	-0.06	100.02
1.0000	0.11	-0.59	100.16
2.0000	0.21	-1.17	100.32
3.0000	0.32	-1.76	100.48
4.0000	0.42	-2.34	100.65
5.0000	0.53	-2.93	100.81

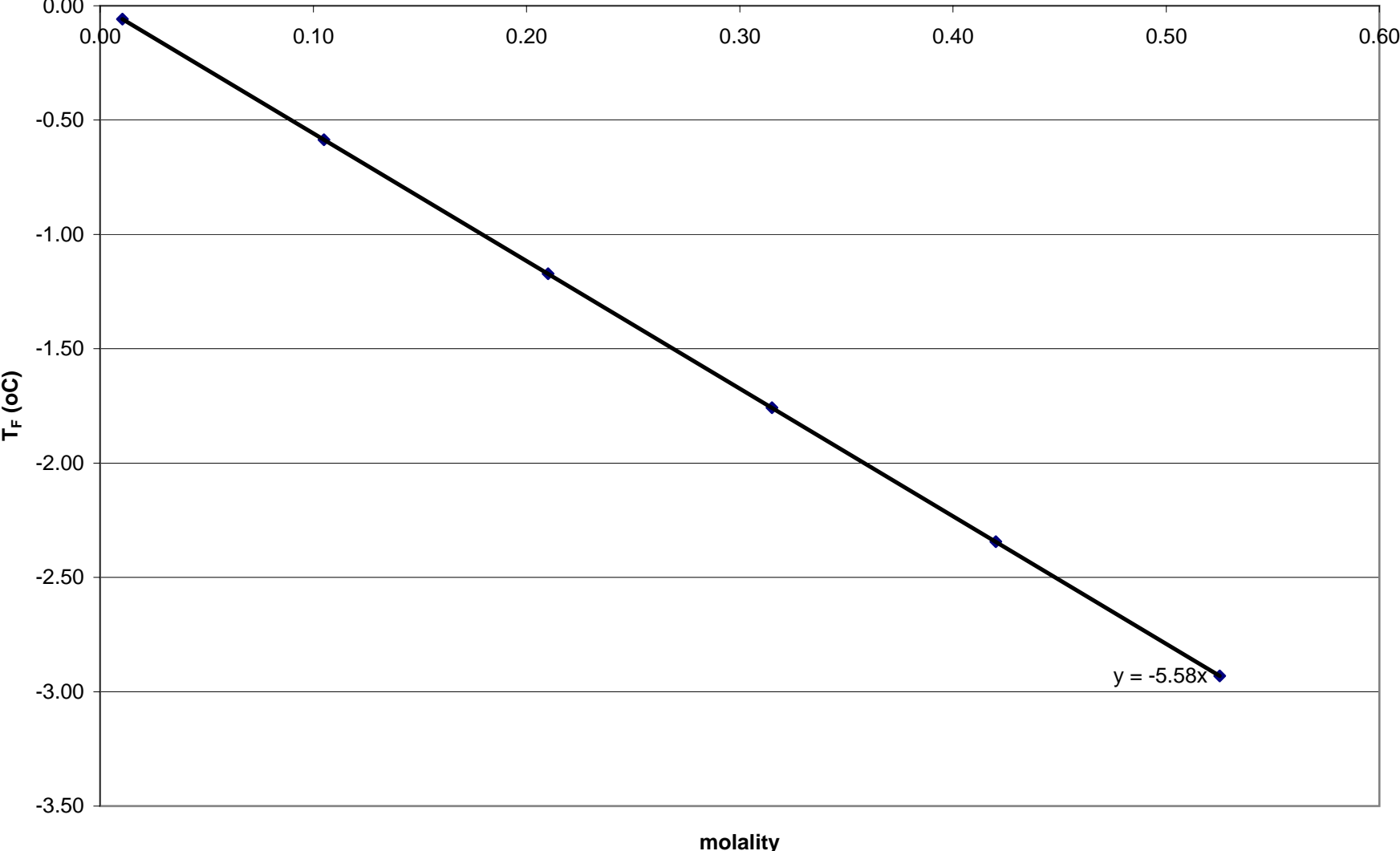
C12H22O11

Mass	molality	Tf	Tb
0.1000	0.0029	-0.01	100.00
1.0000	0.0292	-0.05	100.01
2.0000	0.0584	-0.11	100.03
3.0000	0.0876	-0.16	100.04
4.0000	0.1169	-0.22	100.06
5.0000	0.1461	-0.27	100.07

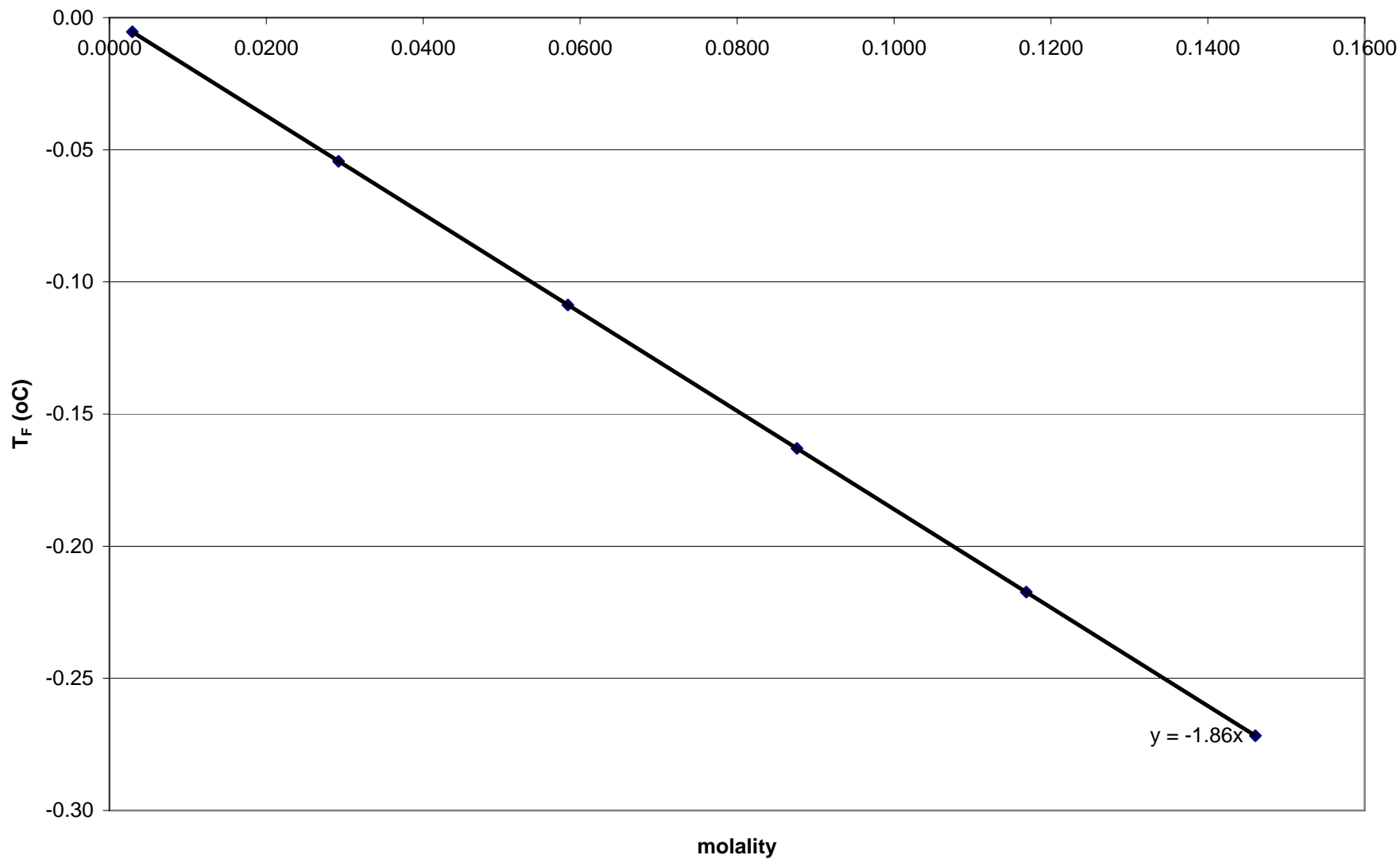
Freezing Point of Solutions with
NaCl, LiF, and HCl



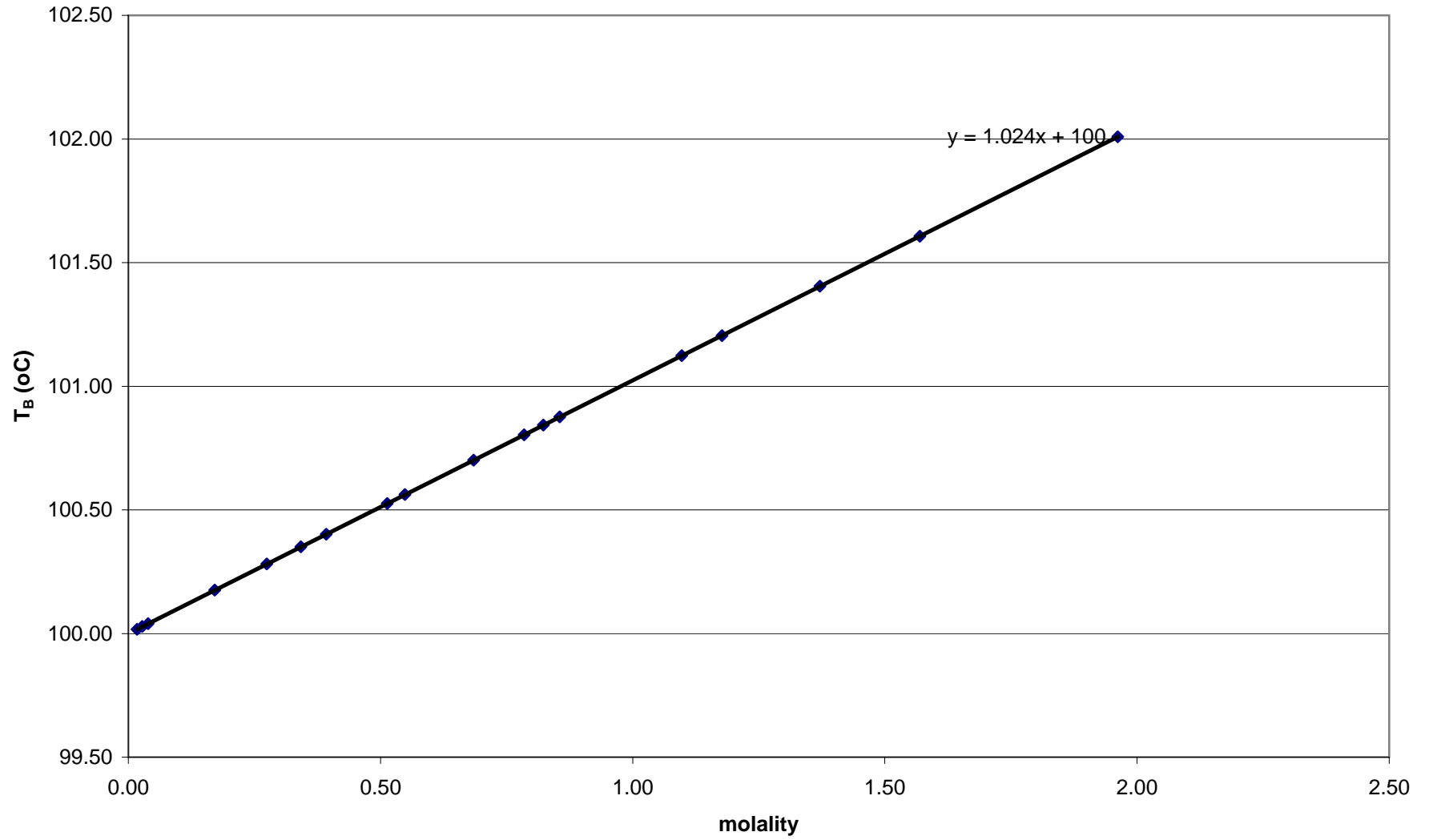
Freezing Point of Solutions MgCl2



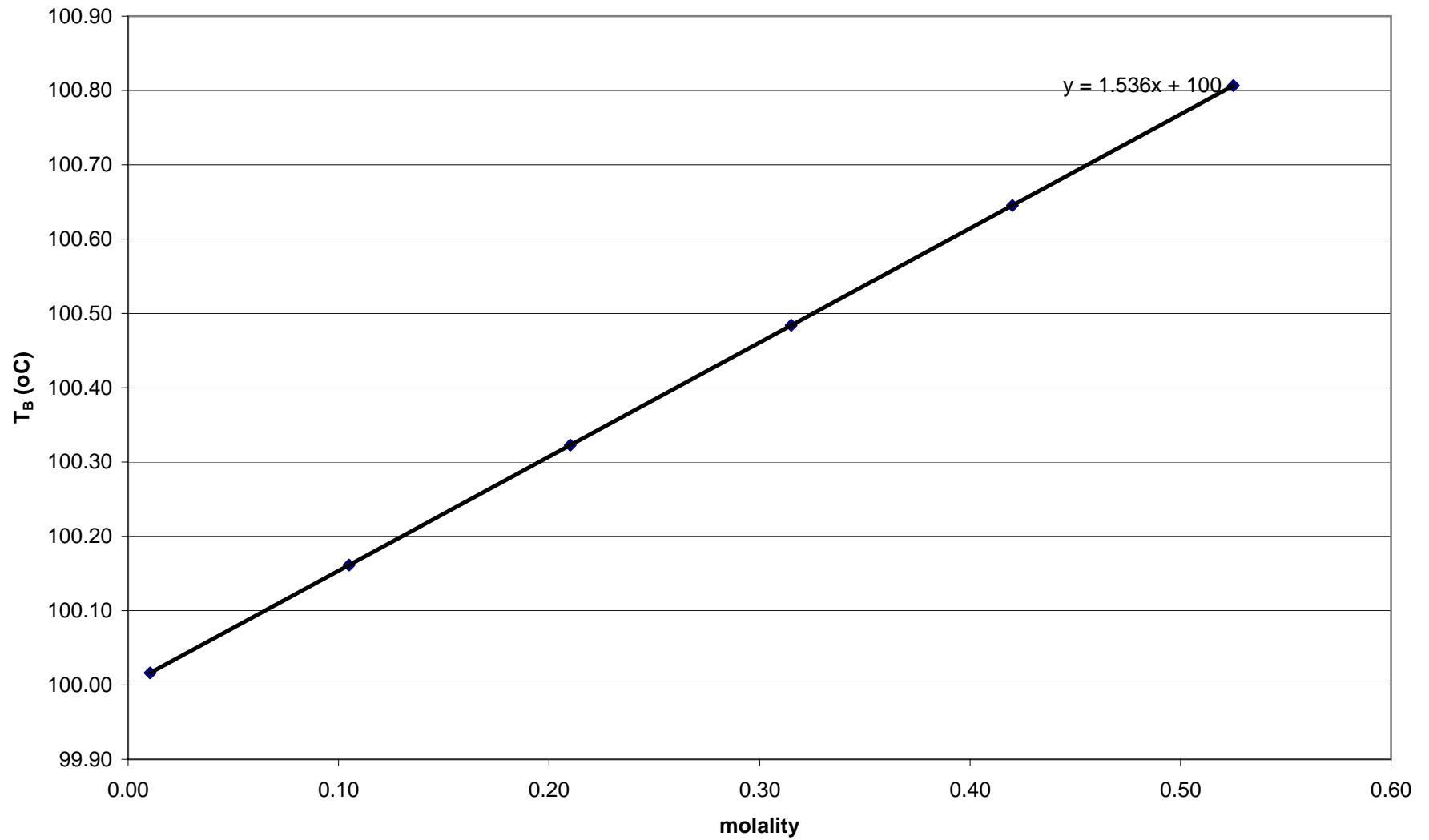
Freezing Point of Solutions Sucrose



Boiling Point of Solutions with
NaCl, LiF, and HCl



Boiling Point of Solutions with
MgCl₂



Boiling Point of Solutions with sucrose

