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APPENDICES

Appendix A

The data of diameter and thickness for the nominal X=0.00

No	950 °C		1000 °C		1100 °C		1150 °C		1200 °C	
	d	t	d	t	d	t	d	t	d	t
1	100	27	224	82.4	307	180	314	314	908	228
2	80	27	234	103	245	111	337	354	702	309
3	70	27	201	106	270	103	309	330	891	201
4	-	33	247	88	289	159	469	388	866	258
5	-	27	201	86	240	136	542	368	1000	257
6	-	-	247	73	337	204	541	374	1090	257
7	-	-	190	103	384	153	453	377	1030	257
8	-	-	193	94	252	153	366	380	737	257
9	-	-	222	111	281	134	402	381	876	285
10	-		232	-	327	135	412	333	685	285
11	-	-	229	-	278	167	435	382	962	200
12	-	-	191	-	334	-	459	363	840	238
13	-	-	191	-	368	-	415	-	830	214
14		-	211	-	327	-	492	-	833	-
15	-	-	210	-	353	-	520	-	780	-
16	-	-	220	-	307	-	582	-	910	-
17	-		234	-	345	-	572	-	894	-
18	-	-	216	-	340	-	634	-	828	-
19	-	-	224	-	361	-	617	-	773	-
20	-	-	216	-		-	-		1040	-
$\overline{x}$	83.33	28.20	216.65	91.04	312.89	148.63	458.55	362	881.39	249.69
SD	15.27	2.68	1797	15.21	43.17	29.31	94.59	24.12	109.45	32.93

The data of diameter and thickness for the nominal X=0.25

No	950 °C		1000 °C		1050 °C		1100 °C		1150 °C		1200 °C	
	d	t	d	t	d	t	d	t	d	t	d	t
1	90	33	167	60.1	229	72.1	356	137	850	309	908	228
2	120	27	170	87.6	265	72.1	446	120	818	288	1150	250
3	80	27	163	87.1	183	97.9	343	157	819	294	891	309
4	87	40	180	59.3	240	110	384	139	685	240	866	310
5	80	40	170	71.4	368	110	319	100	752	304	933	345
6	140	-	115	64.4	175	73	206	160	546	227	1090	275
7	-	-	185	74	201	73	366	206	537	288	1030	214
8	-	-	155	59.3	193	110	268	117	603	294	683	333
9	-	-	163	89.9	245	85	420	137	818	240	880	333
10	-	-	173	64.4	173	85	293	160	818	259	992	286
11	-	-	129	64.4	234	73	367	148	659	272	1090	238
12	-	-	139	74.7	196	73	273	131	636	-	1040	238
13	-	-	174	61.8	188	-	363	177	600	-	756	-
14	-	-	168	73.8	178	-	314	152	551	-	765	-
15	-	-	192	-	317	-	397	194	545	-	1270	-
16	-	-	117	-	270	-	402	108	-	-	-	-
17	-	-	218	-	381	-	278	-	-	-	-	-
18	-	-	-	-	-	-	325	-	-	-	-	-
19	-	-	-	-	-	-	307	-	-	-	-	-
20	-	-	-	-	-	-	270	-	-	-	-	-
$\bar{x}$	99.50	33.40	163.41	70.87	237.41	86.17	334.85	146.44	682.47	274.09	956.27	279.92
SD	24.77	6.50	26.47	10.84	65.17	16.33	60.41	23.36	119.06	28.40	159.89	45.86

The data of diameter and thickness for the nominal X=0.50

No	950 °C		1000 °C		1050 °C		1100 °C		1150 °C		1200 °C	
	d	t	d	t	d	t	d	t	d	t	d	t
1	130	20	206	88.5	294	82.4	216	85	319	72.1	505	155
2	150	33	216	79.9	308	94.2	262	77	366	71	520	172
3	110	20	185	79.9	237	82.4	232	75	402	93	515	147
4	80	27	201	72	270	64.6	289	86	381	88	464	155
5	-	-	212	71	325	80.7	219	88	361	89	515	185
6	-	-	204	71	255	67	255	82	356	82	571	160
7	-	-	154	71	307	66.9	268	74	345	71	404	160
8	-	-	154	86	250	71.4	260	80	301	71	400	160
9	-	-	154	86	252	74.2	224	70	307	89	567	195
10	-	--	212	86	263	69.6	209	82	379	91	434	167
11	-		206	86	252	74.2	252	80	291	91	425	191
12	-	-	241	86	317	74.2	240	80	258	91	447	191
13	-	-	174	70	278	-	211	89	321	-	416	168
14	-	-	174	-	307	-	258	82	-	-	528	-
15	-	-	174	-	-	-	204	-	-	-	558	-
16	-	-	188	-	-	-	229	-	-	-	389	-
17	-	-	202	-	-	-	206	-	-	-	520	-
18	-	-	174	-	-	-	-	-	-	-	-	-
19	-	-	232	-	-	-	-	-	-	-	-	-
20	-	-	171	-	-	-	-	-	-	-	-	-
$\overline{x}$	117.50	25	191.70	82	279.64	75.15	237.29	79	337.46	83.26	481.06	169.83
SD	29.86	6.27	25.37	7.39	29.31	8.34	25.43	6.87	41.73	9.24	62.01	16.58

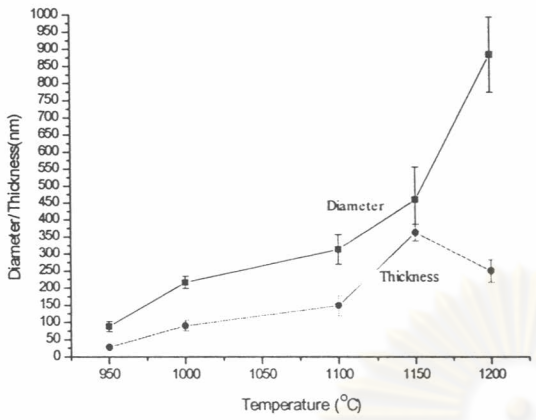
The data of diameter and thickness for the nominal X=0.75

No	950 °C		1000 °C		1050 °C		1100 °C		1150 °C		1200 °C	
	d	t	d	t	d	t	d	t	d	t	d	t
1	210	27	209	71	250	70	222	80	283	98	886	276
2	130	27	188	70	198	70	251	85	232	80	1130	324
3	60	33	222	68.5	211	70	211	77	278	75	1070	301
4	90	27	319	70	193	70	240	75	232	80	886	361
5	-	-	180	70	170	72	193	75	300	85	943	322
6	-	-	170	70	232	62	219	75	260	93	759	276
7	-	-	201	70	206	77	209	75	263	82	943	381
8	-	-	276	70	206	80	243	93	255	89	-	291
9	-	-	222	70	180	83	219	70	255	97	-	343
10	-	-	234	71	283	63	170	93	289	75	-	286
11	-	-	193	71	268	71	274	-	258	75	-	286
12	-	-	206	71	-	70	-	-	294	75	-	-
13	-	-	185	70	-	75	-	-	291	75	-	-
14	-	-		70	-	-	-	-		75	-	-
$\bar{x}$	122.50	28.5	215.77	69.87	217.91	71.93	222.82	79.69	268.46	82.93	945.29	313.36
SD	65.00	3.00	41.50	1.03	36.13	5.72	28.56	7.92	42.25	8.65	123.43	35.85

The data of diameter and thickness for the nominal X=1.00

No	950 °C		1000 °C		1050 °C		1100 °C		1150 °C		1200 °C	
	d	t	d	t	d	t	d	t	d	t	d	t
1	80	30	163	80	232	80	180	75	198	91	152	76
2	100	27	199	71	234	66	219	72	227	74	216	82
3	90	27	167	71	214	80	200	72	225	62	170	83
4	90	27	149	68	242	60	222	75	219	74	172	97
5		27	157	76	200	71	222	78	173	60	265	93
6		27	165	65	222	87	222	63	222	79	193	71
7			194	67	222	67	222	67	196	72	265	71
8			180	71	222	67	232	77	273	85	306	71
9			142	71	222	67	204	77	219	86	206	72
10			171	71	222	67	184	77	207	86	230	72
11			142		178			77	201	86	264	72
12			157		171			67	234		254	
13			142		157			67	206		254	
14			186		157				206		216	
15			186						206		204	
16									206			
17									206			
$\bar{x}$	90.00	27.50	166.73	18.95	206.79	71.2	211.17	72.19	213.18	77.47	224.47	78.18
SD	8.16	1.22	18.95	4.25	29.01	8.35	17.12	5.09	21.02	5.05	43.21	9.41

Appendix B



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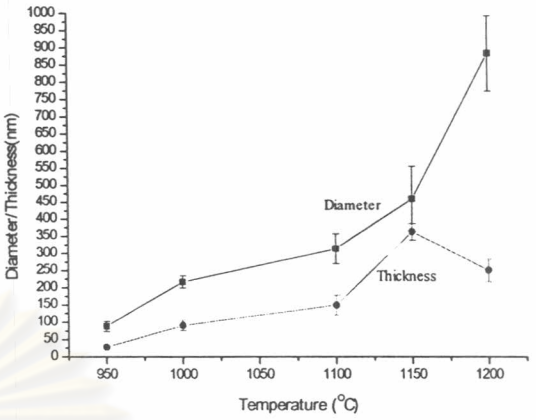

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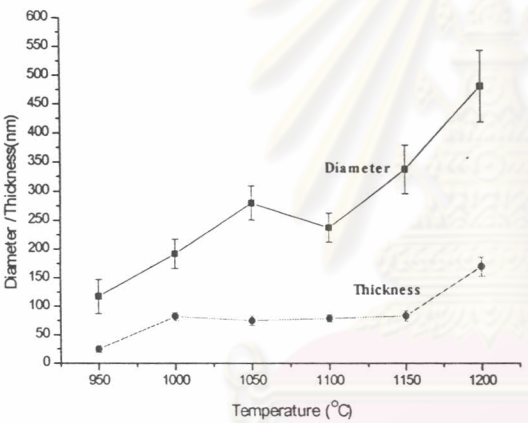
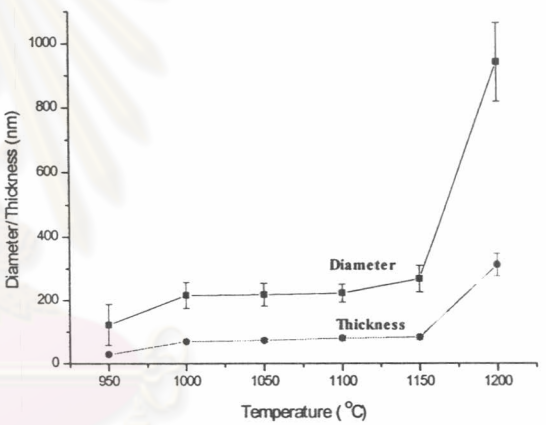
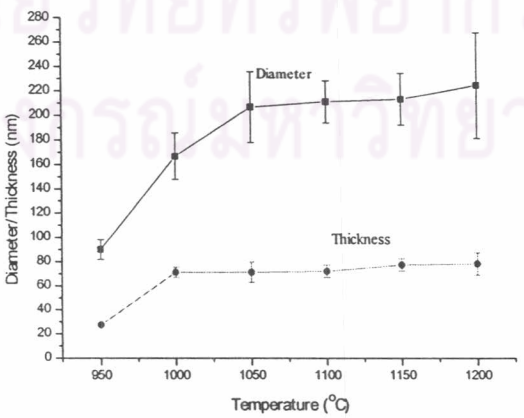


c) x = 0.50



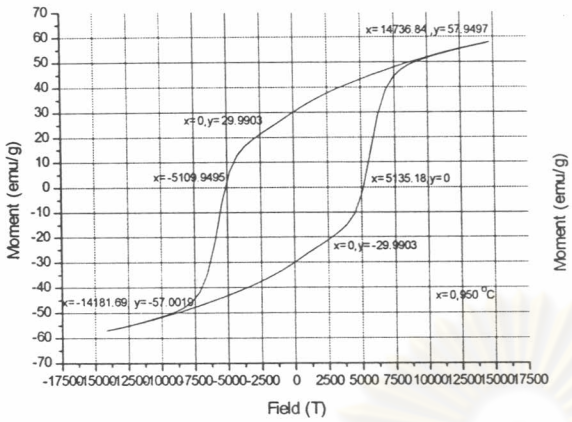
d) x = 0.75



e) x = 1.00

Particle diameter and thickness of samples at different X levels and temperatures

Appendix C



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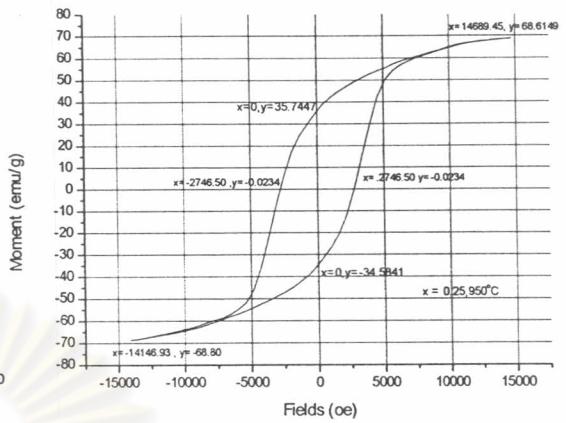

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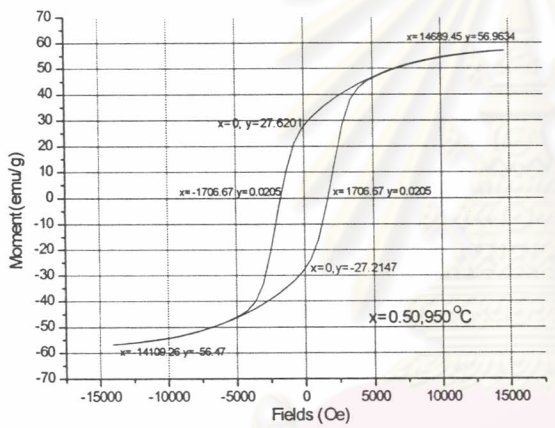

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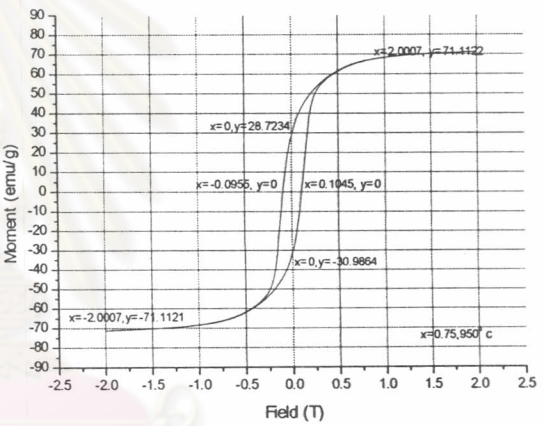

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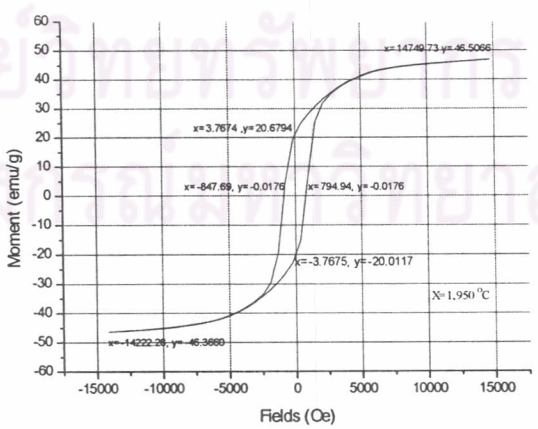
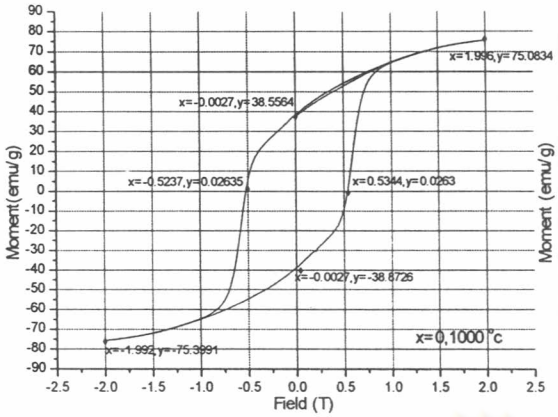


e) x = 1

Hysteresis loop of specimens at different nominal x levels calcined at 950 °C



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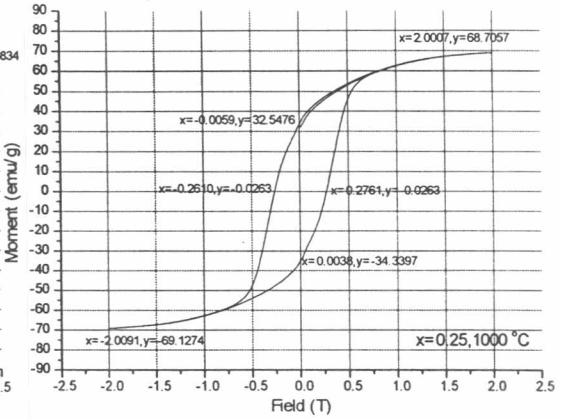
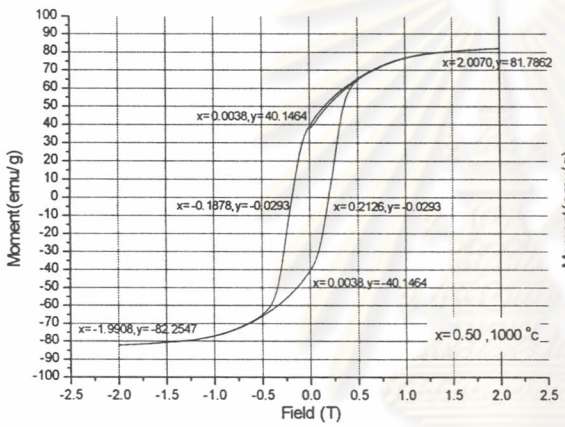


b) x = 0.25



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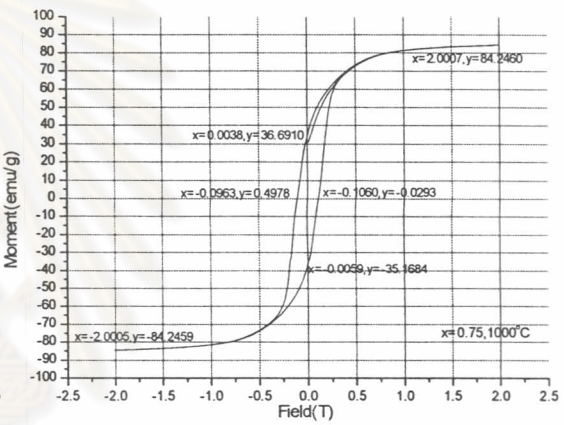

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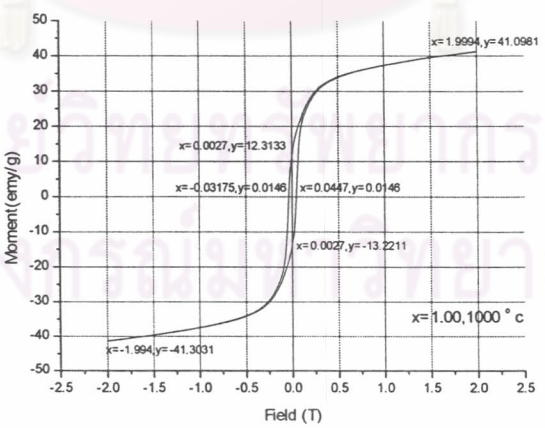
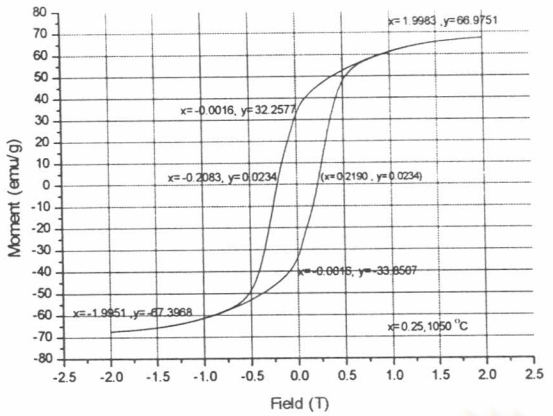


e) x = 1

Hysteresis loop of specimens at different nominal x levels calcined at 1000°C



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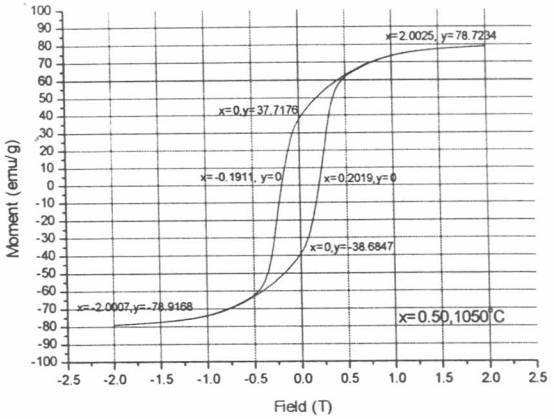
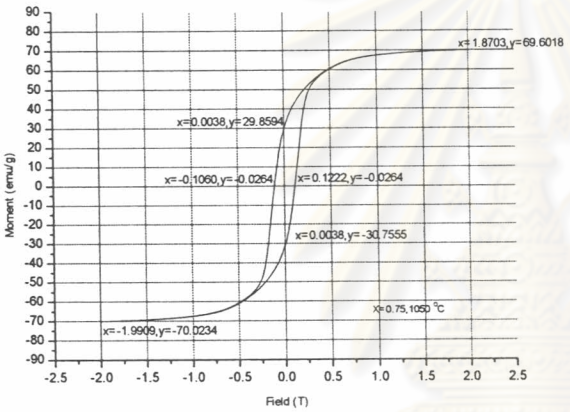


b) x = 0.50



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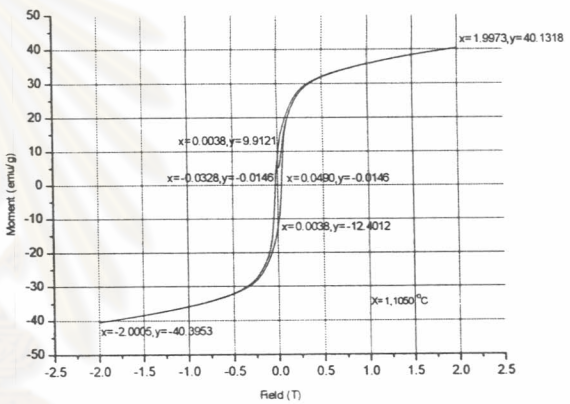
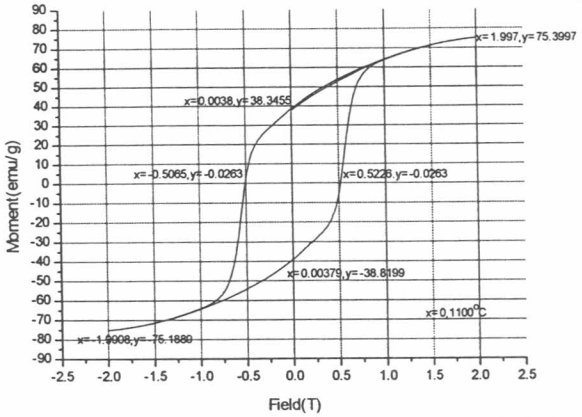
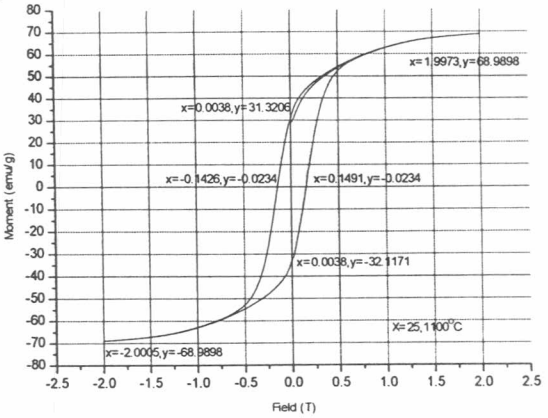


d) x = 1.00

Hysteresis loop of specimens at different nominal x levels calcined at 1050 °C





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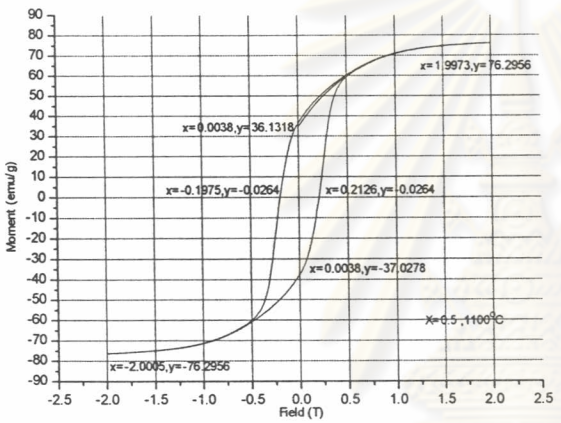
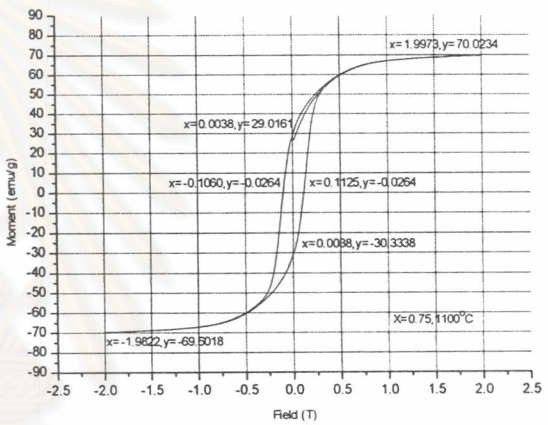
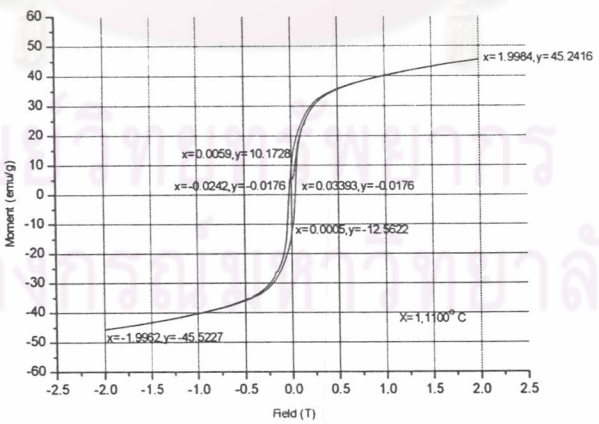
b) x = 0.25





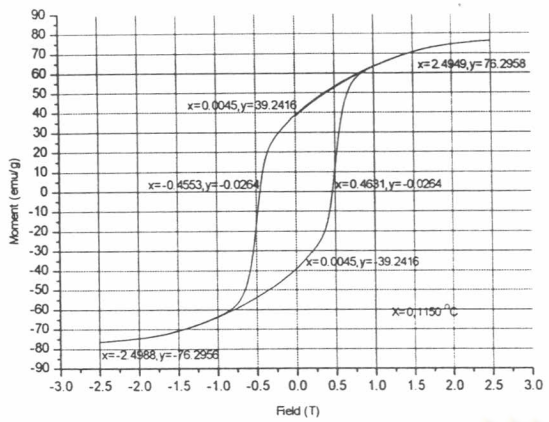
c) x = 0.5

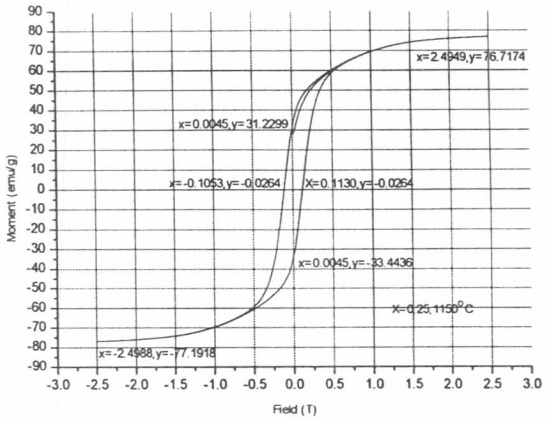
d) x = 0.75



e) x = 1

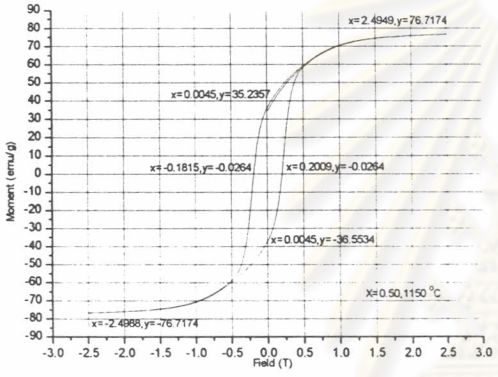
Hysteresis loop of specimens at different nominal x levels calcined at 1100°C

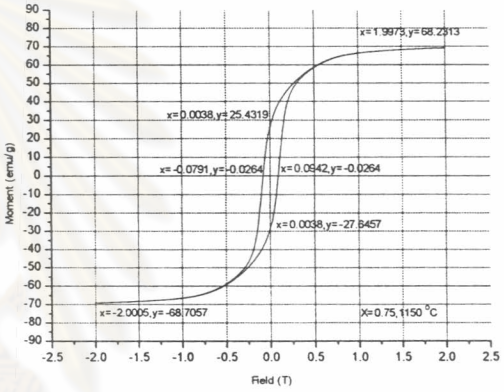




a) x = 0

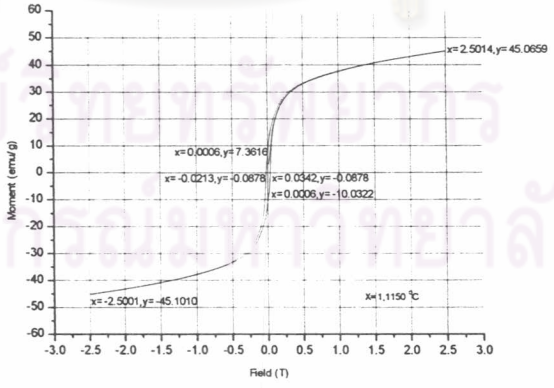
b) x = 0.25





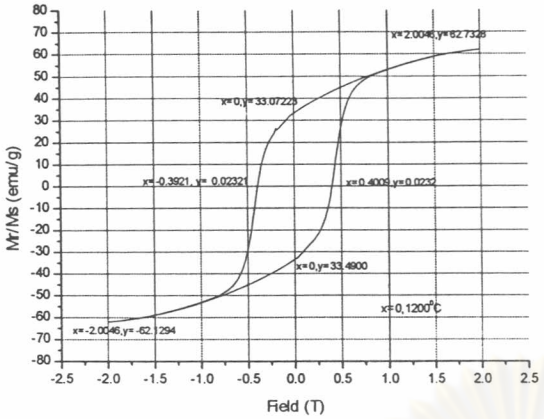
c) x = 0.5

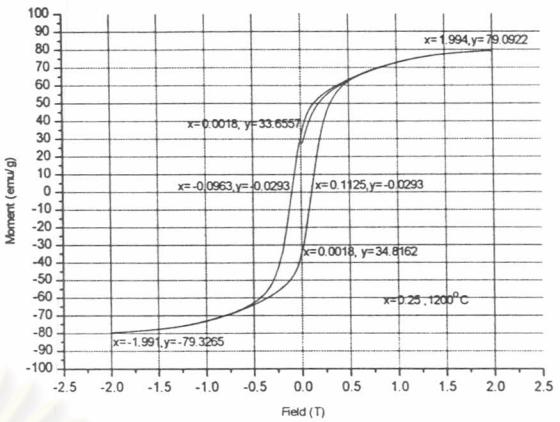
d) x = 0.75



e) x = 1

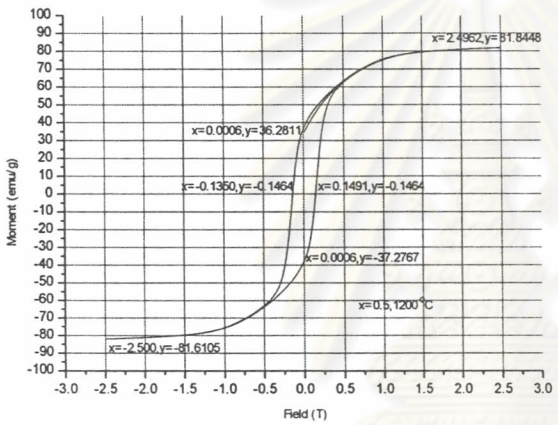
Hysteresis loop of specimens at different nominal x levels calcineed at 1150 °C

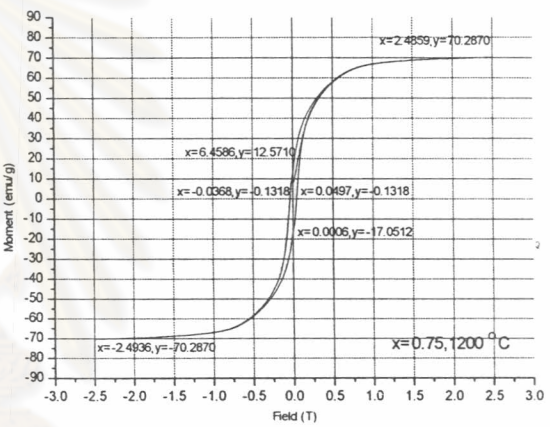




a) x = 0

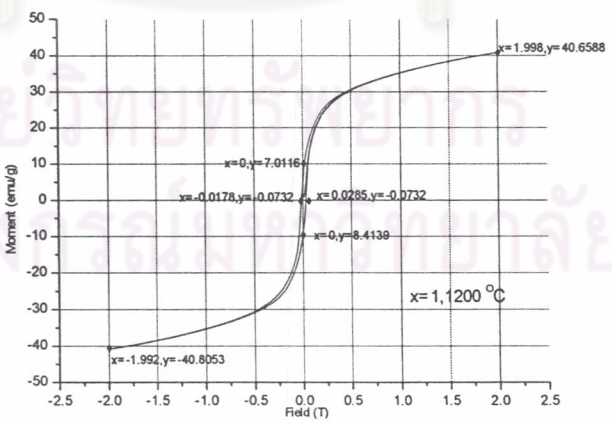
b) x = 0.25





c) x = 0.5

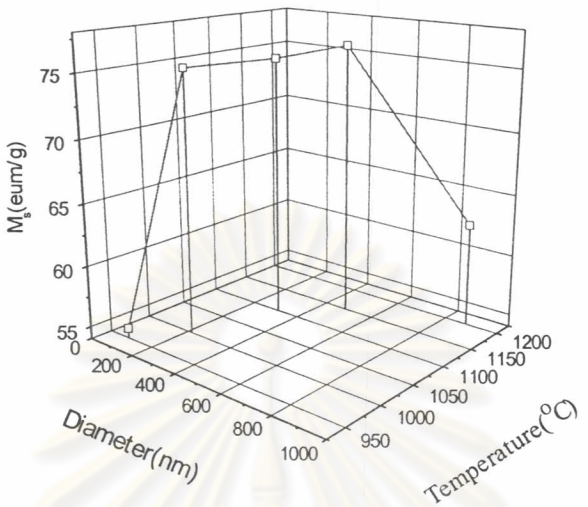
d) x = 0.75



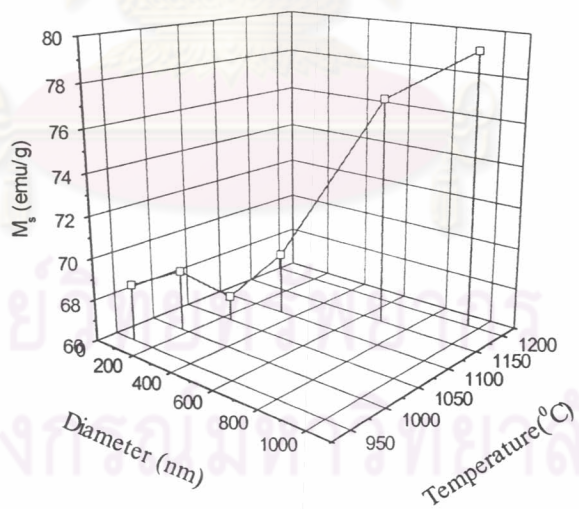
e) x = 1

Hysteresis loop of specimens at different nominal x levels cacineded at 1200°C

Appendix D

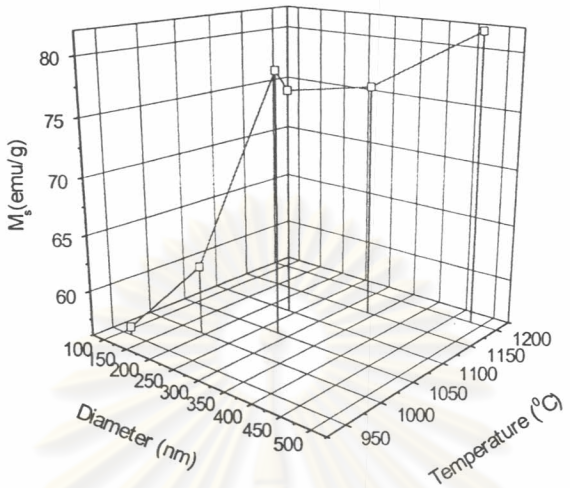


a). X = 0.00

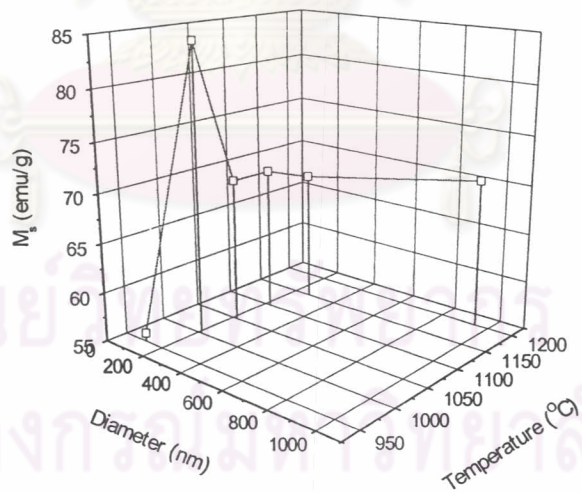


b.) x = 0.25

The relationship between diameter ,saturation magnetization and temperature

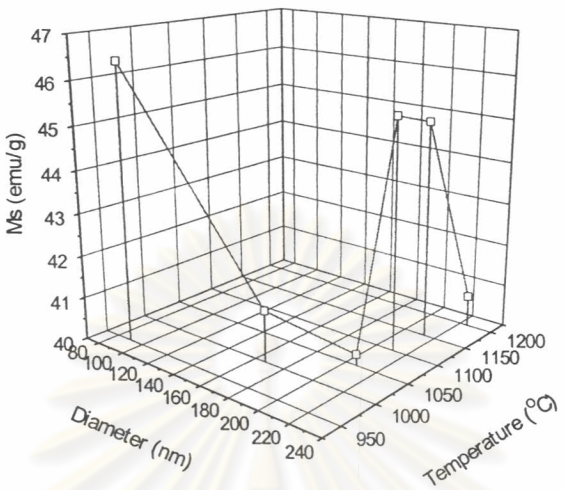


c) x = 0.50



d) x = 0.75

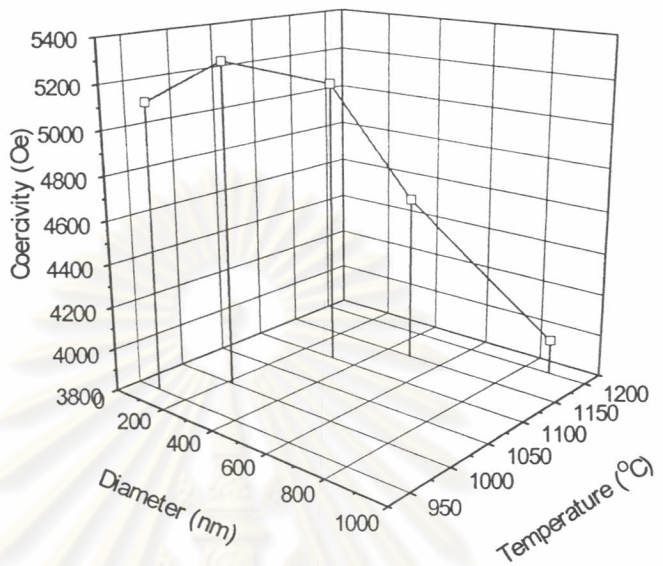
The relationship between diameter ,saturation magnetization and temperature



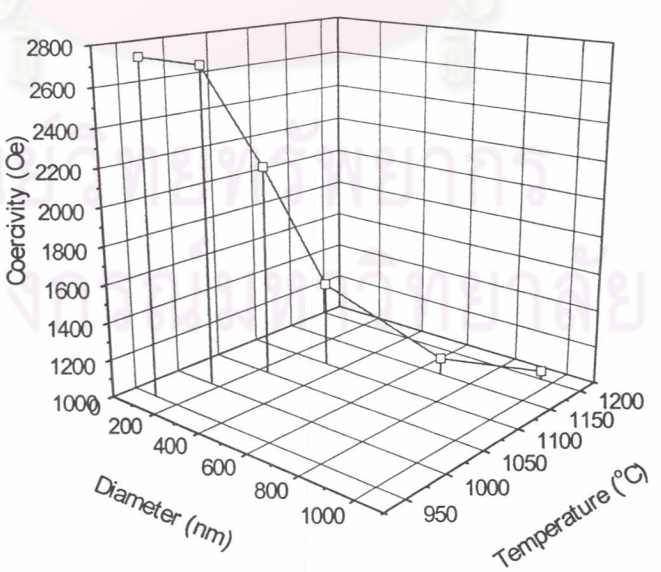
e) x=1.00

The relationship between diameter ,saturation magnetization and temperature

Appendix E

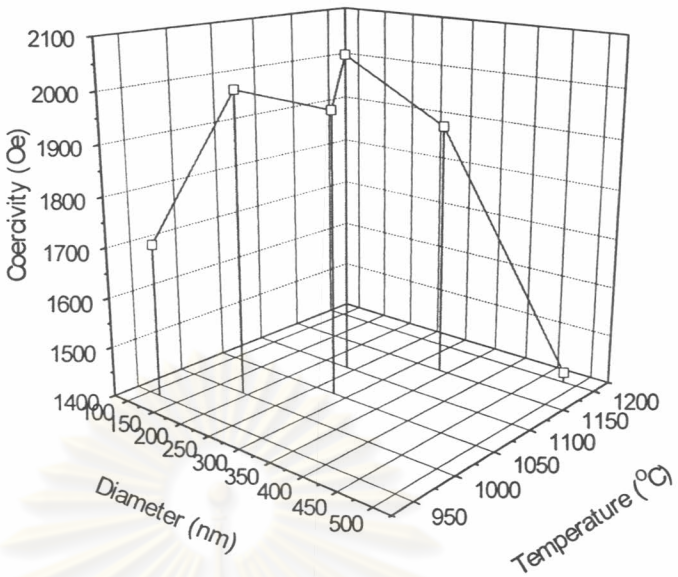


a) X=0.00

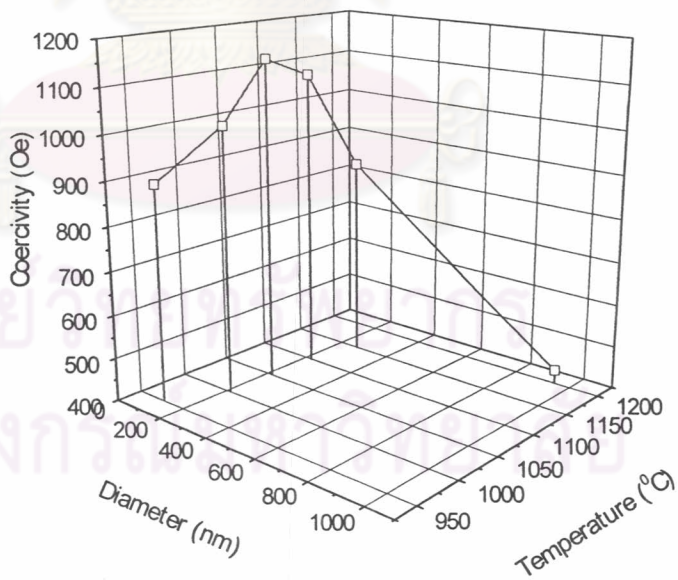


b) X=0.25

The relationship between diameter ,coercivity and temperature

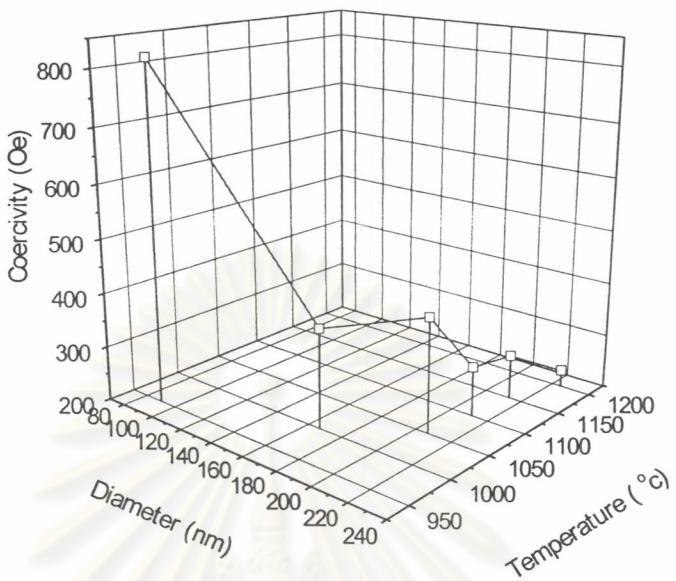


c) X=0.50



d) X=0.75

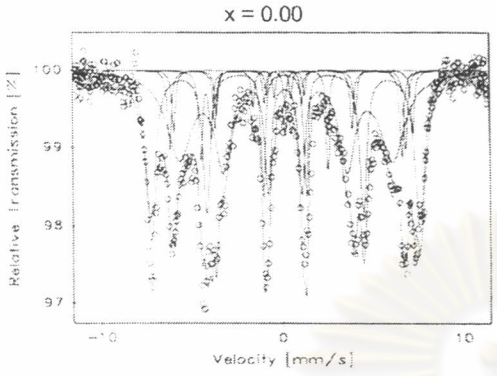
The relationship between diameter, coercivity and temperature



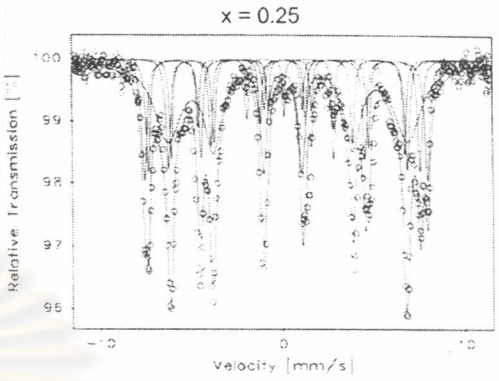
e) x=1.00

The relationship between diameter, coercivity and temperature

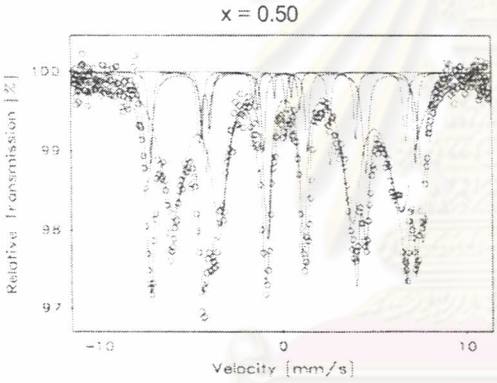
Appendix F



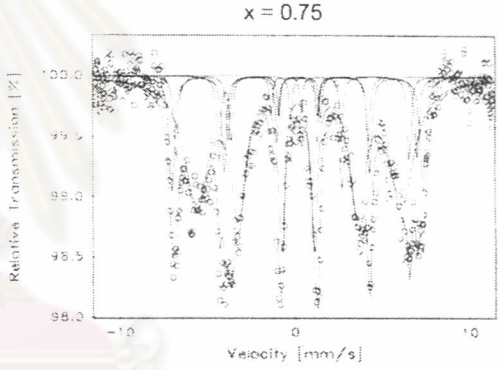
a) x = 0.00



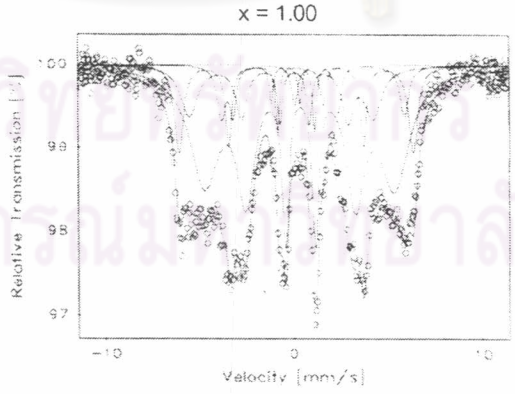
b) x = 0.25



c) x = 0.50



d) x = 0.75



e) x = 1.00

Mossbauer spcectrum of specimens calcined at 1000 ^{o}C at different of the nominal x =000-1.00

VITAE

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