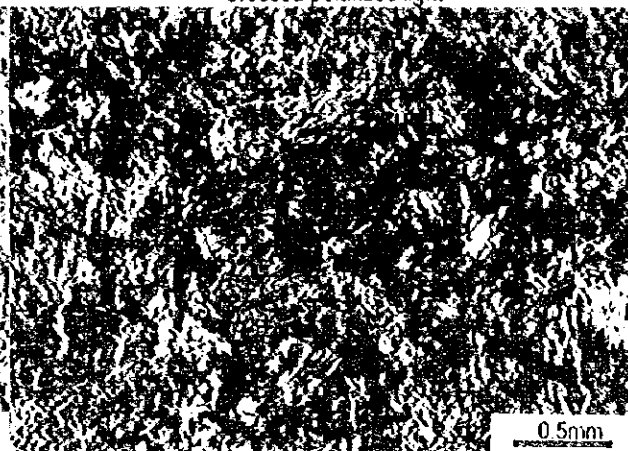
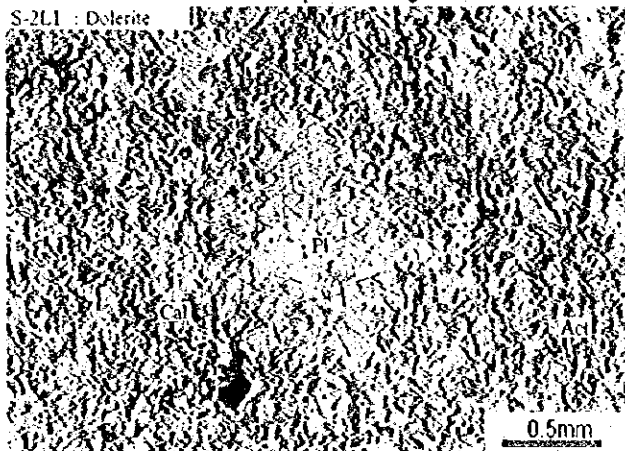


Appendix 2-3 Photomicrographs of the Thin Sections (4/17)

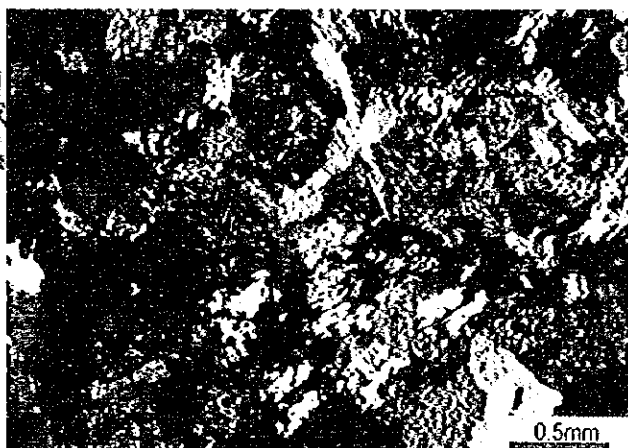
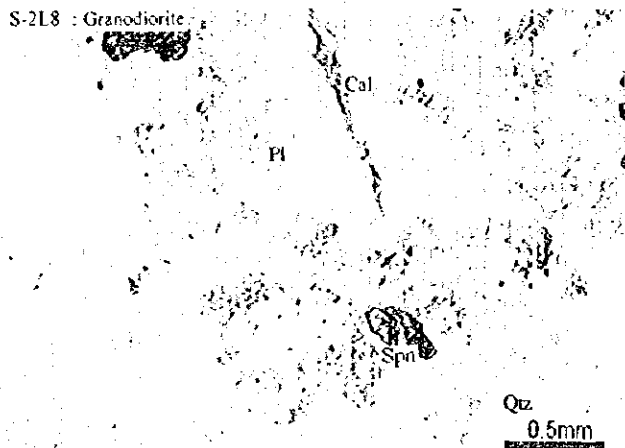
Plain polarized light

Crossed polarized light

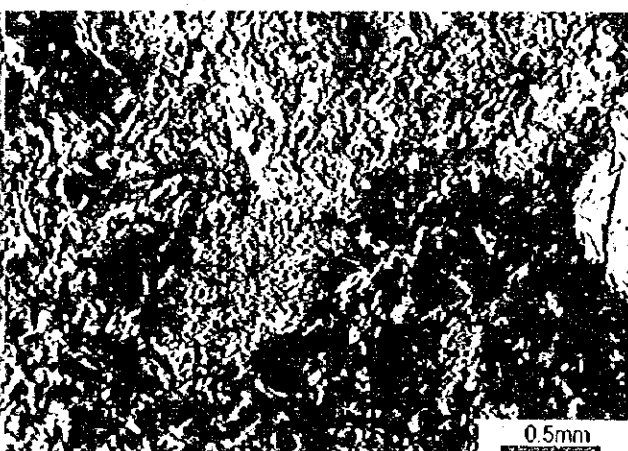
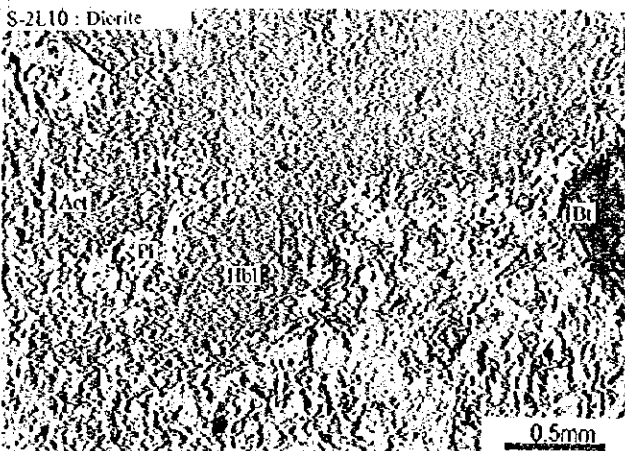
S-2L1 : Dolerite



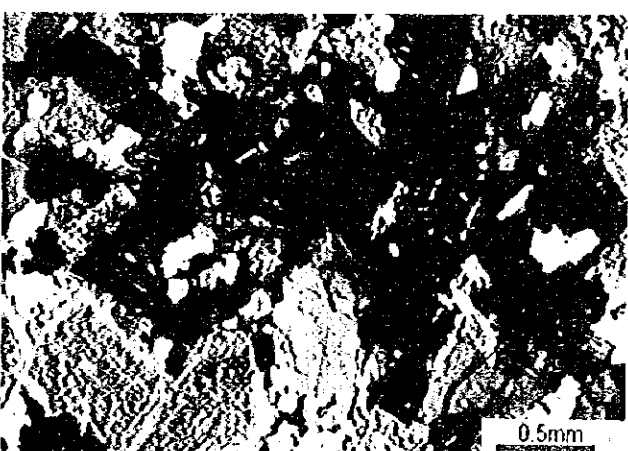
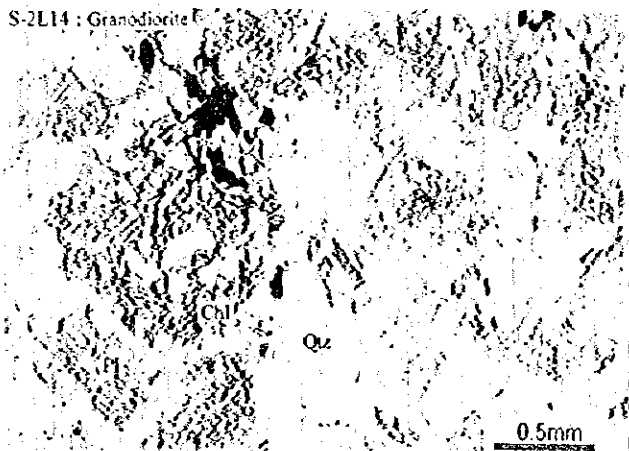
S-2L8 : Granodiorite



S-2L10 : Diorite



S-2L14 : Granodiorite

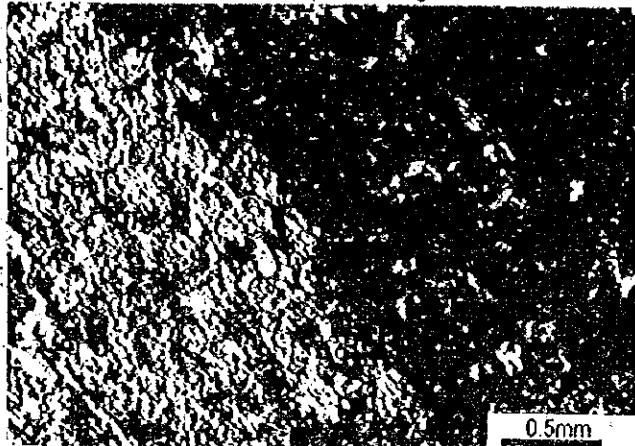
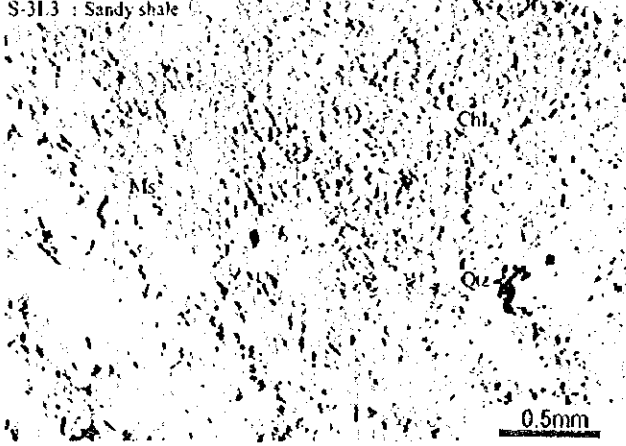


Appendix 2-3 Photomicrographs of the Thin Sections (5/17)

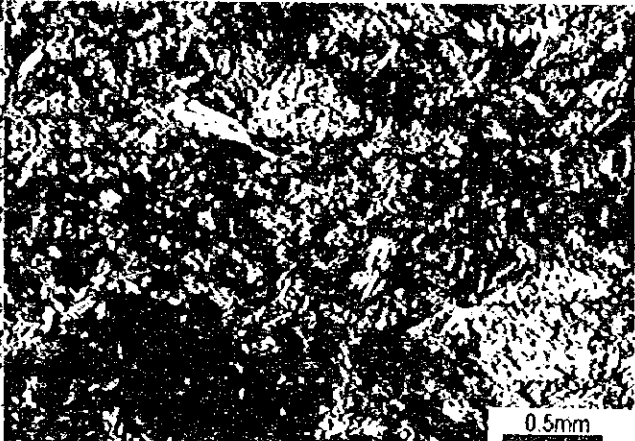
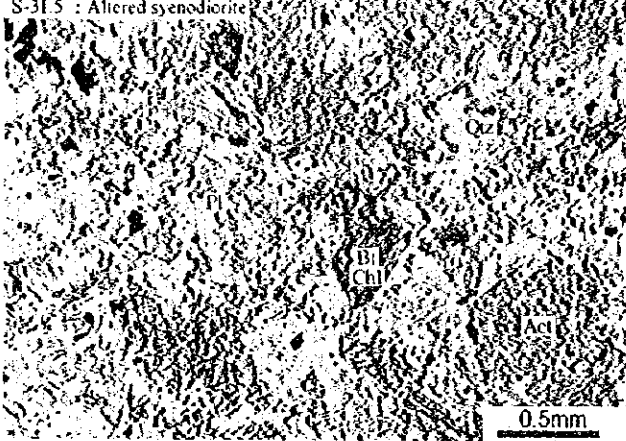
Plain polarized light

Crossed polarized light

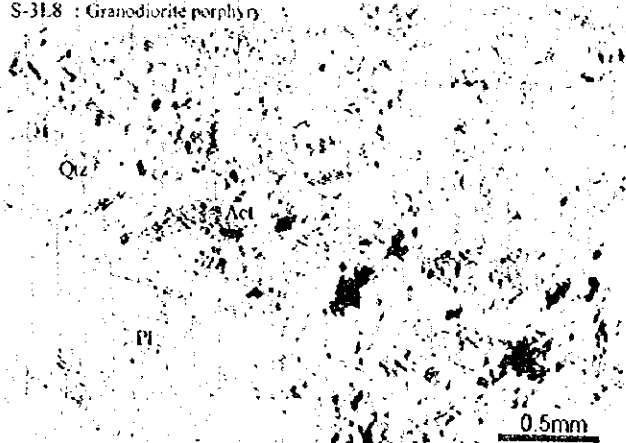
S-31.3 : Sandy shale



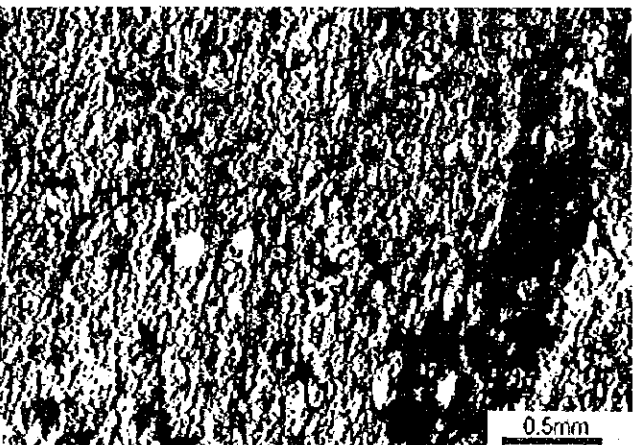
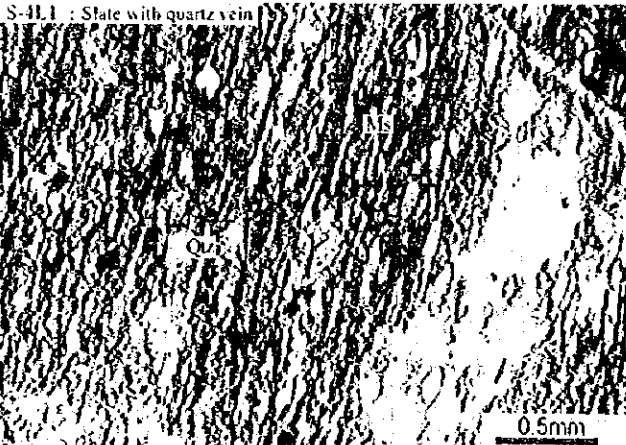
S-31.5 : Altered syenodiorite



S-31.8 : Granodiorite porphyry



S-31.1 : Slate with quartz vein

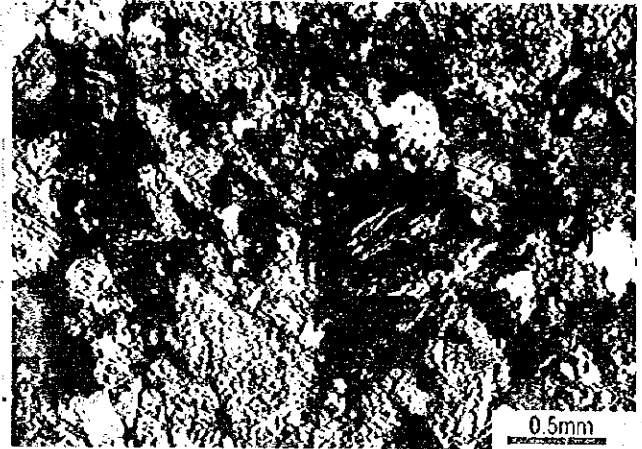
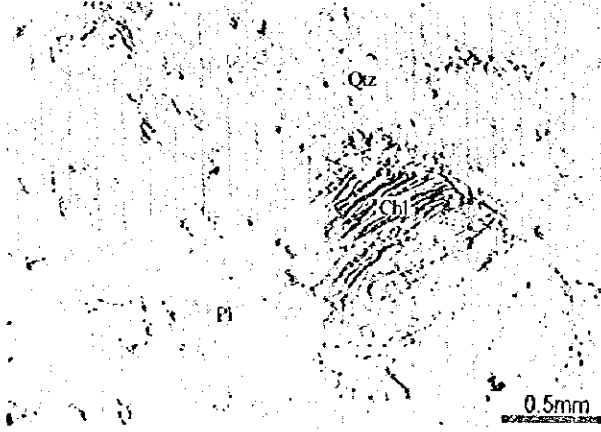


Appendix 2-3 Photomicrographs of the Thin Sections (6/17)

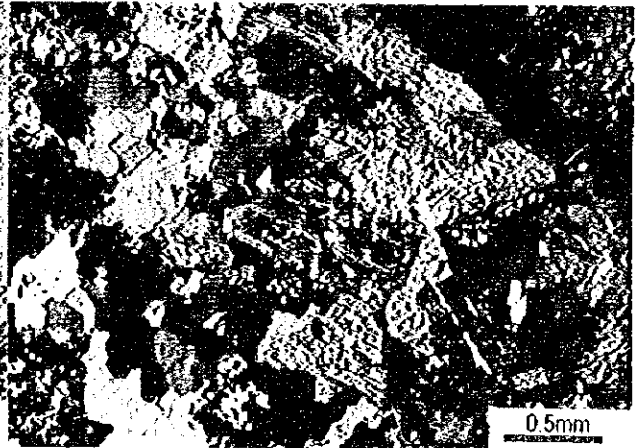
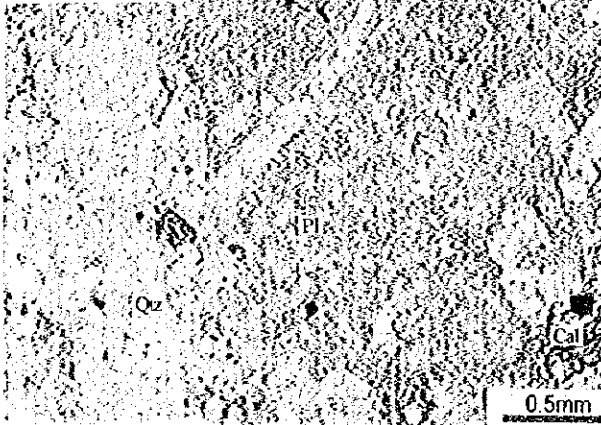
Plain polarized light

Crossed polarized light

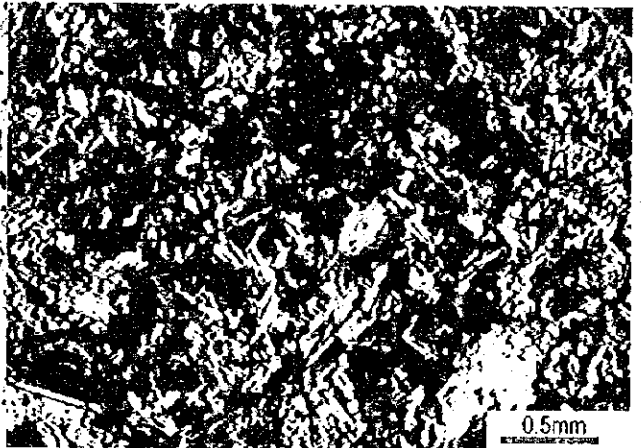
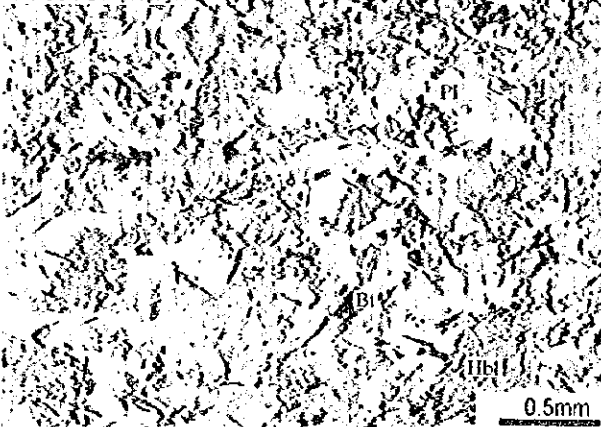
S-4L5 : Granodiorite



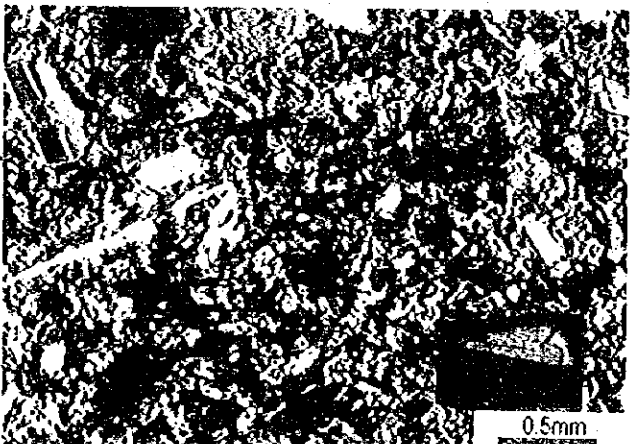
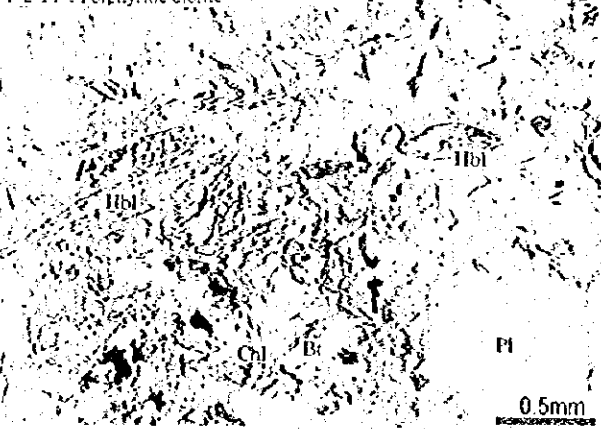
S-4L11 : Granodiorite



T-1 T1 : Lamprophyre



T-2 T1 : Porphyritic diorite

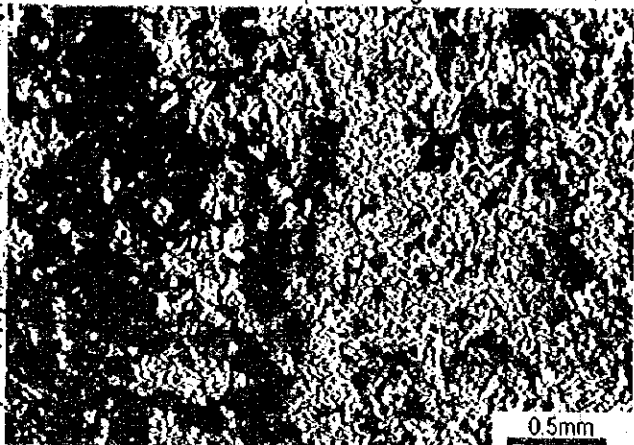
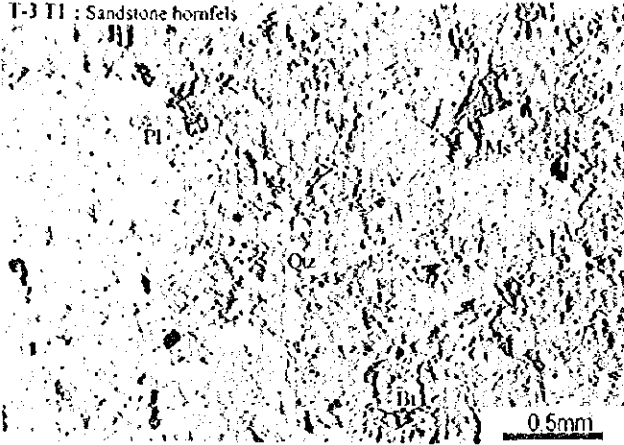


Appendix 2-3 Photomicrographs of the Thin Sections (7/17)

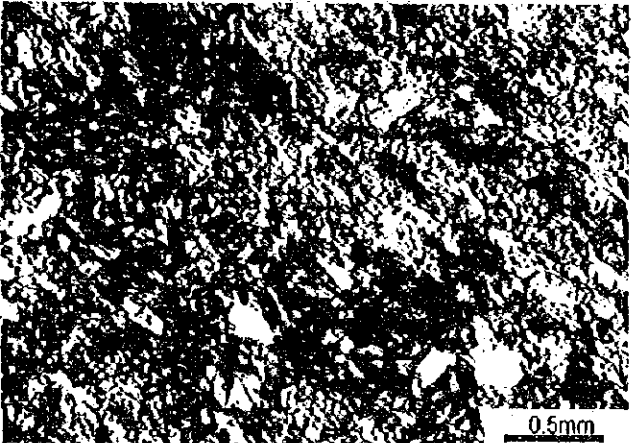
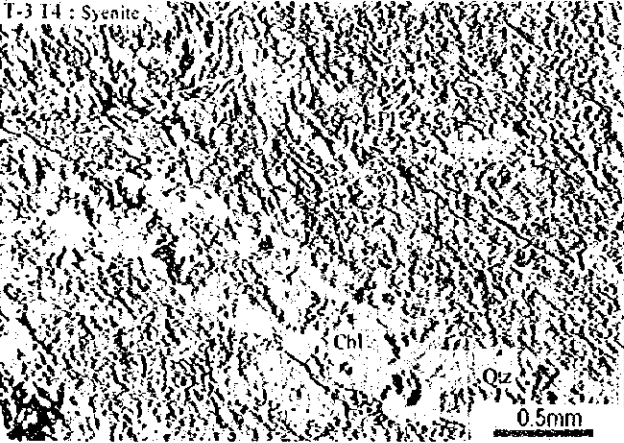
Plain polarized light

Crossed polarized light

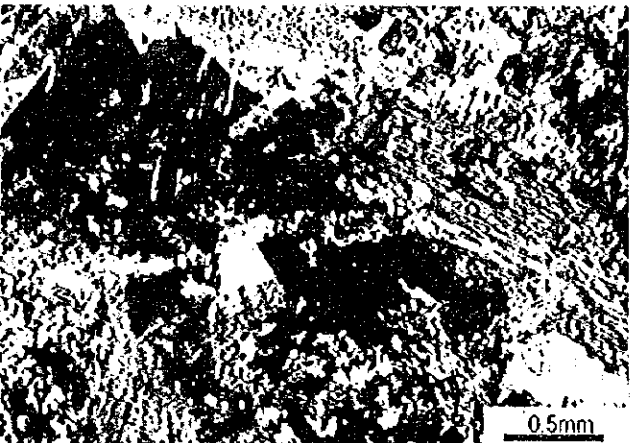
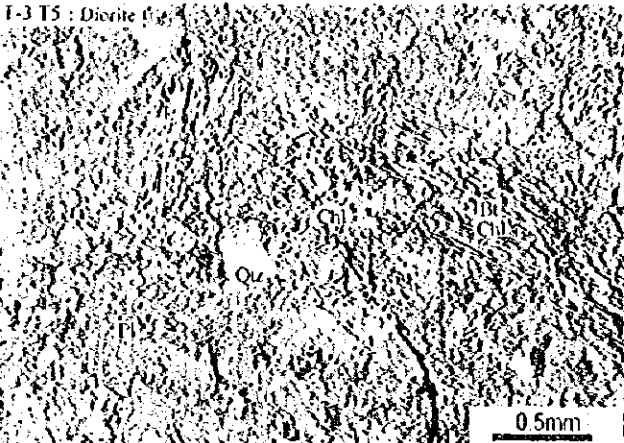
T-3 T1 : Sandstone hornfels



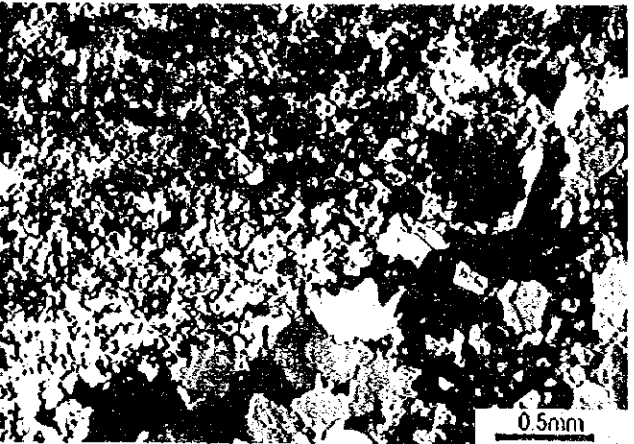
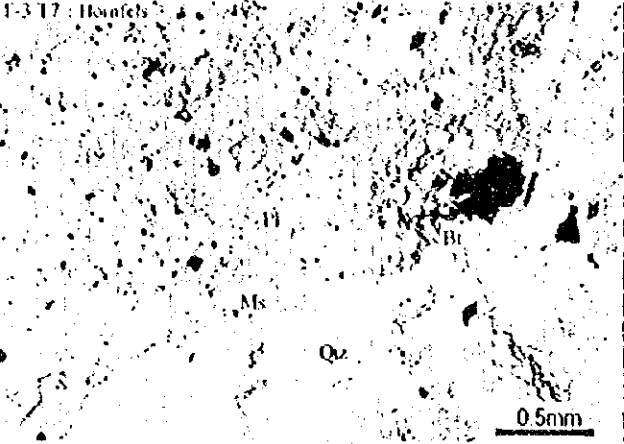
T-3 T4 : Syenite



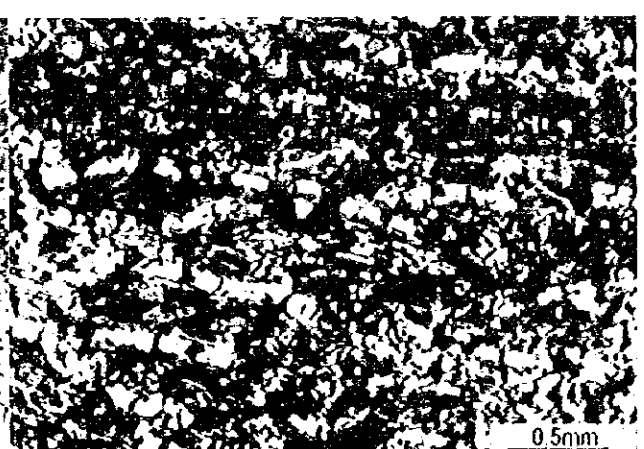
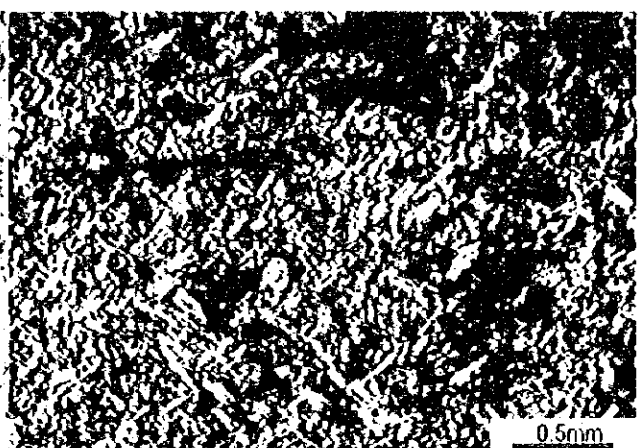
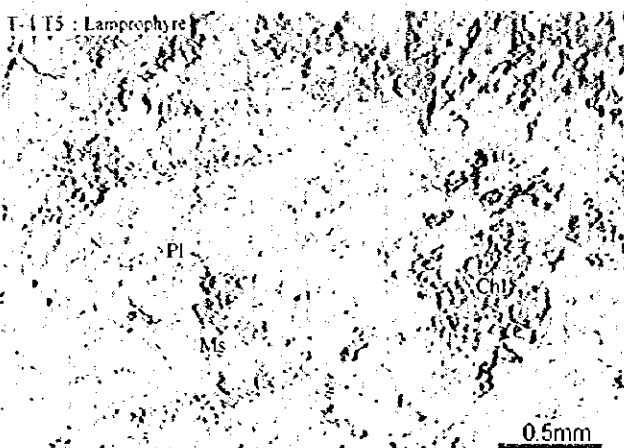
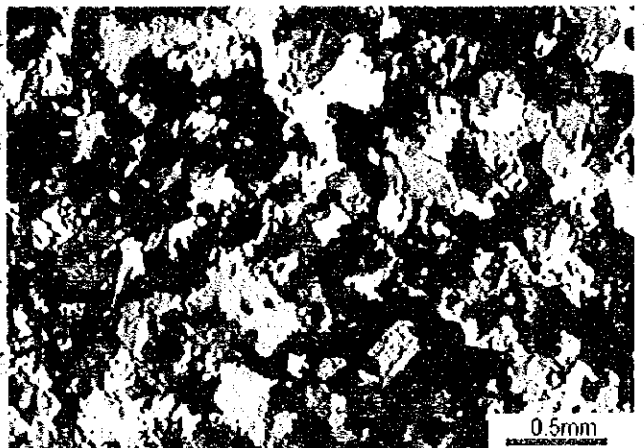
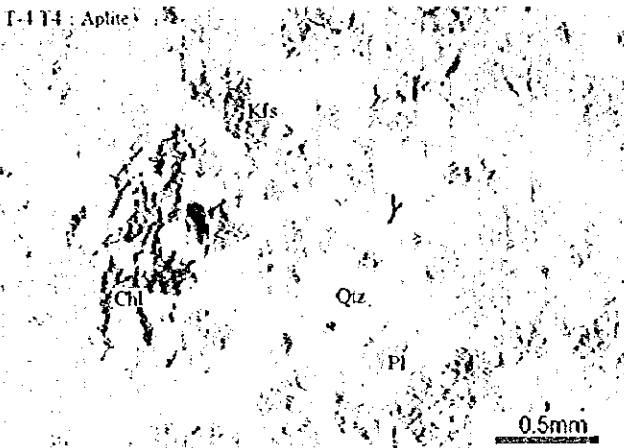
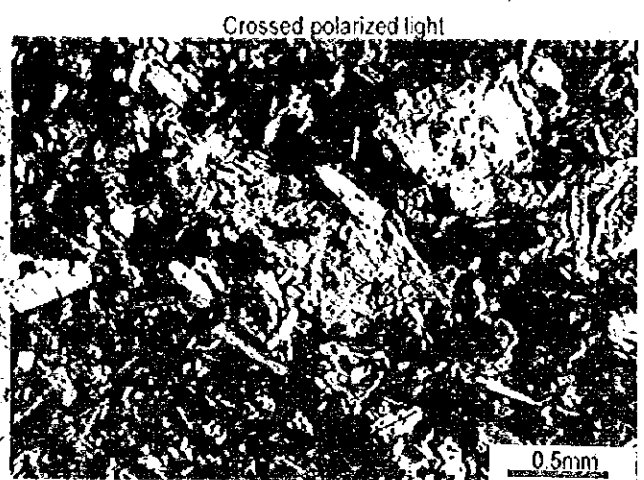
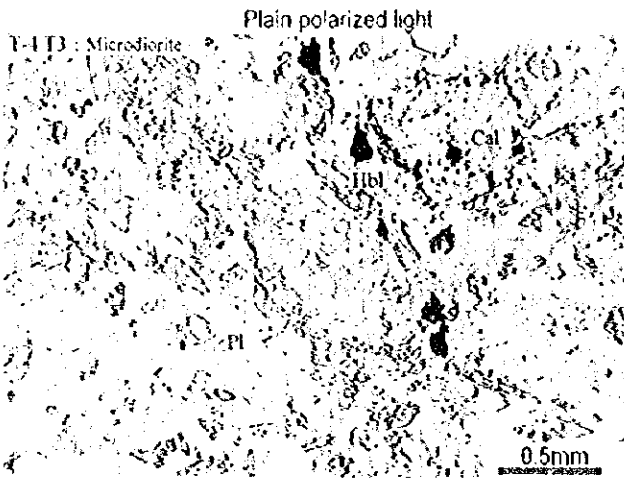
T-3 T5 : Diorite (g)



T-3 T7 : Hornfels



Appendix 2-3 Photomicrographs of the Thin Sections (8/17)

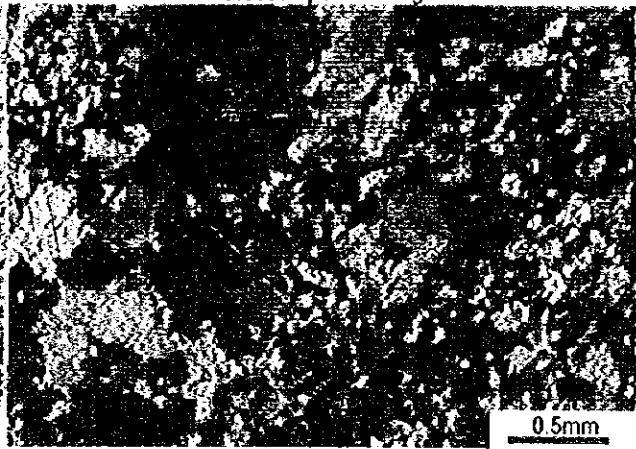
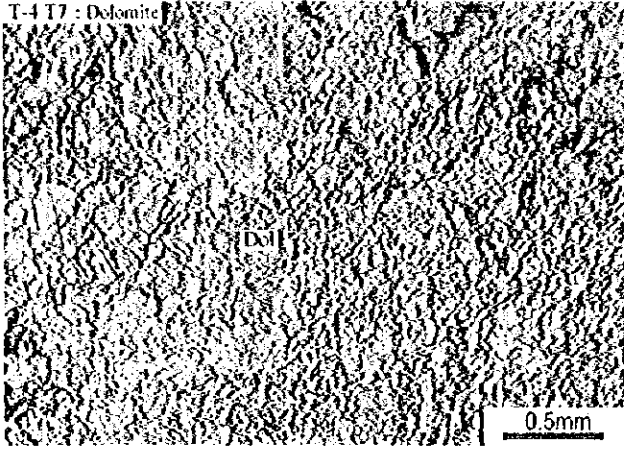


Appendix 2-3 Photomicrographs of the Thin Sections (9/17)

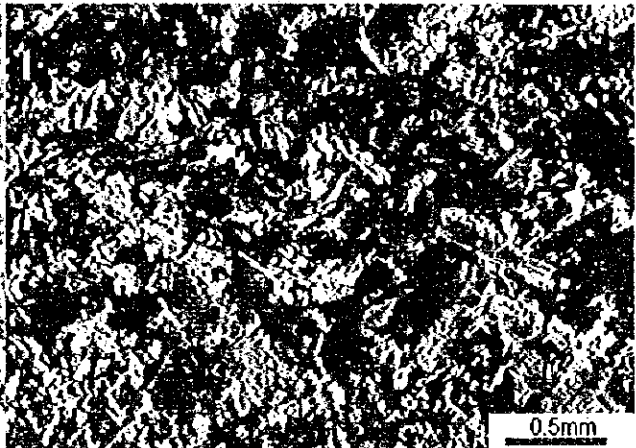
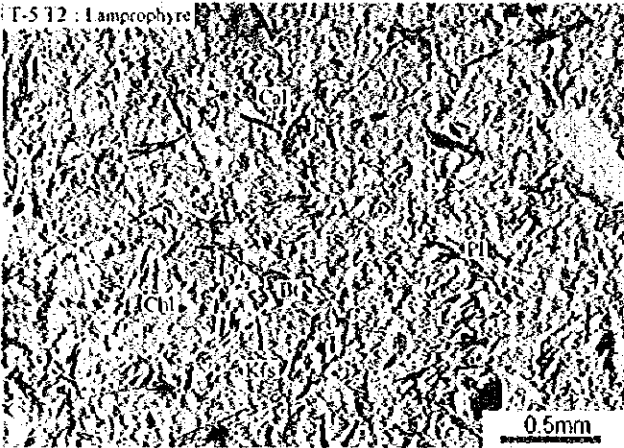
Plain polarized light

Crossed polarized light

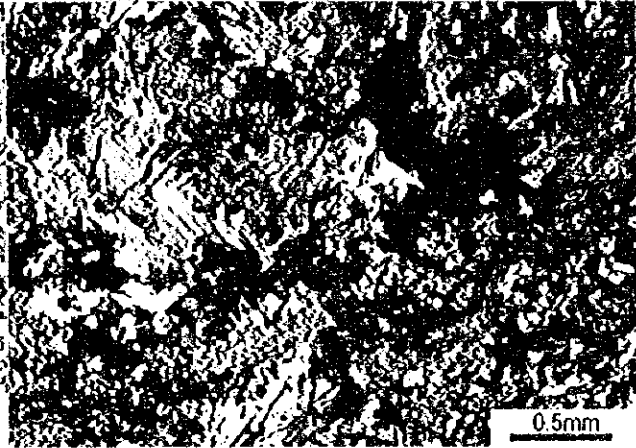
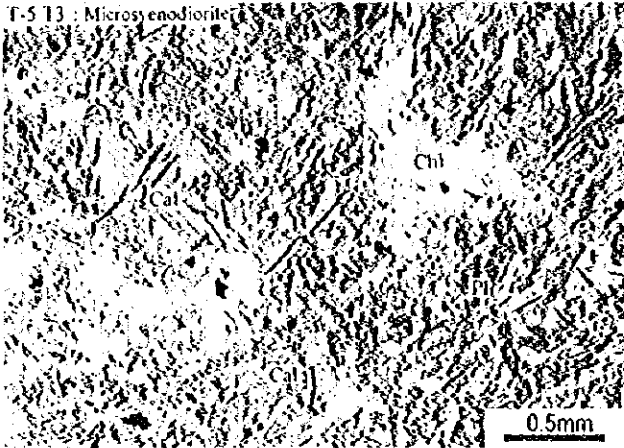
T-4 T7 : Dolomite



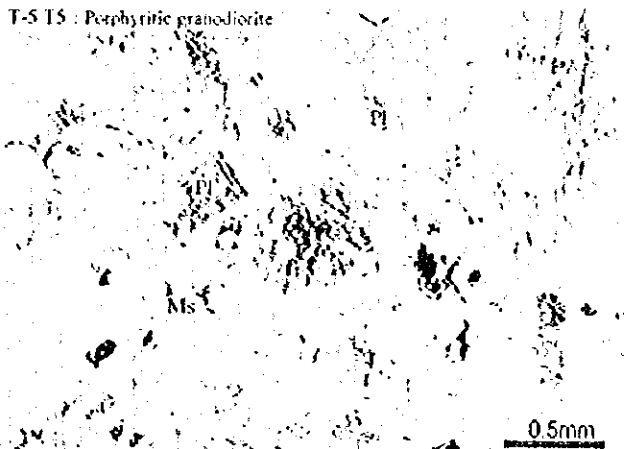
T-5 T2 : Lamprophyre



T-5 T3 : Microsyenodiorite



T-5 T5 : Porphyritic granodiorite

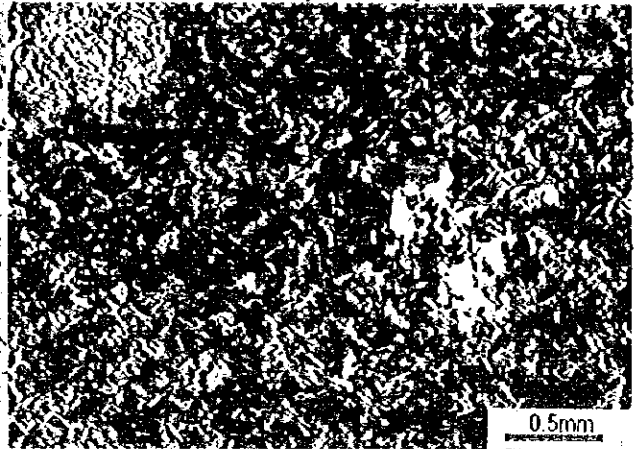
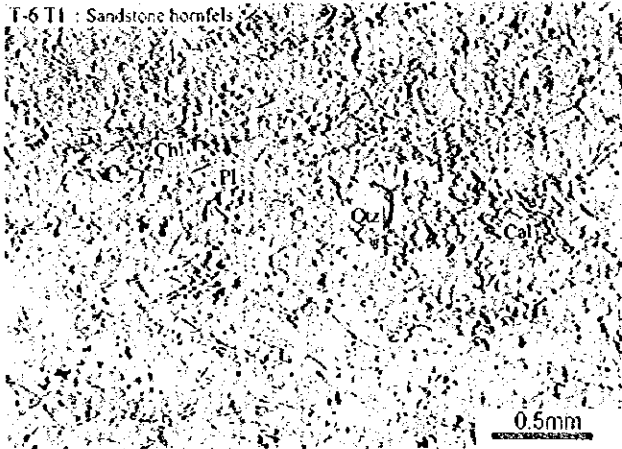


Appendix 2-3 Photomicrographs of the Thin Sections (10/17)

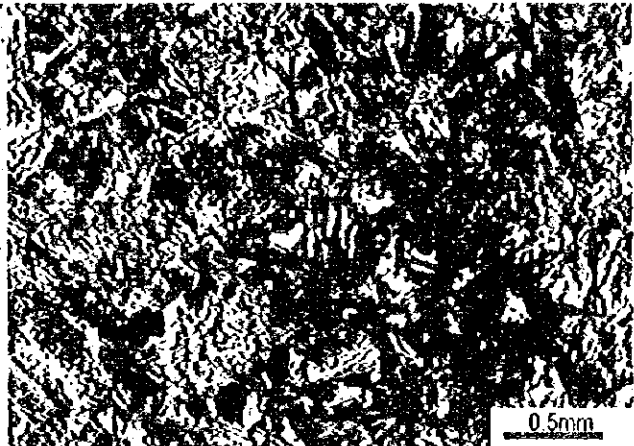
Plain polarized light

Crossed polarized light

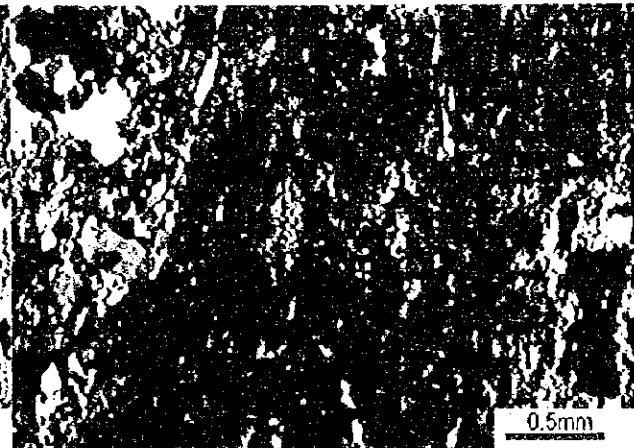
T-6 T1 : Sandstone hornfels



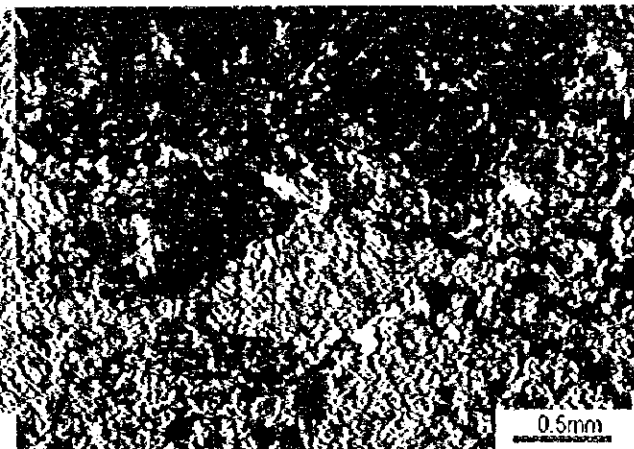
T-6 T3 : Lamprophyre



T-6 T4 : Rhyolite



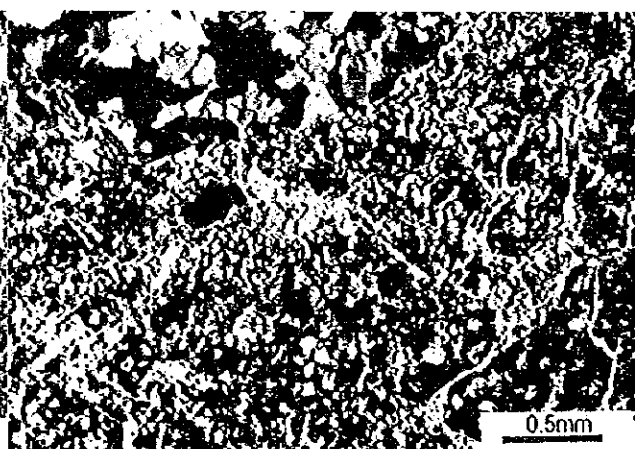
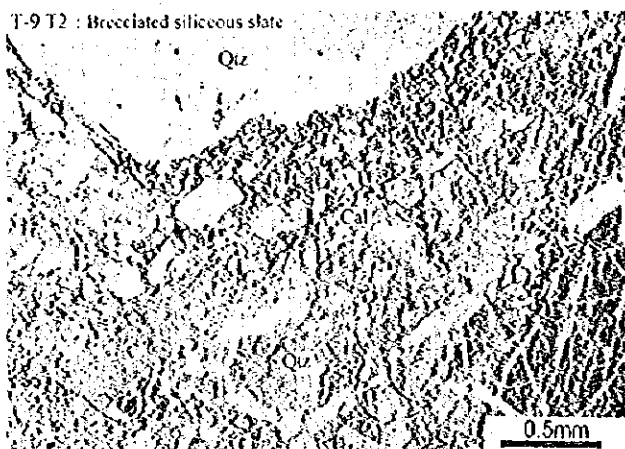
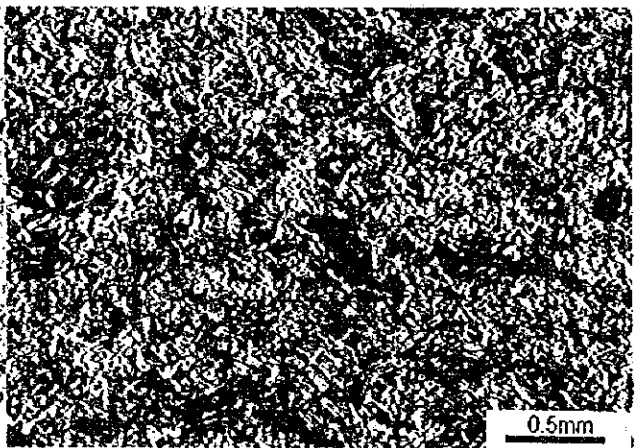
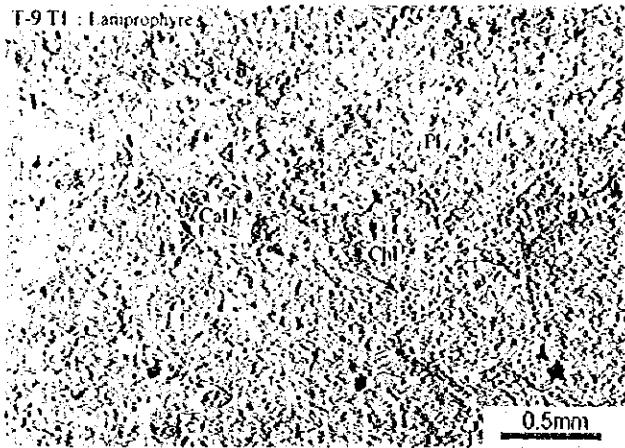
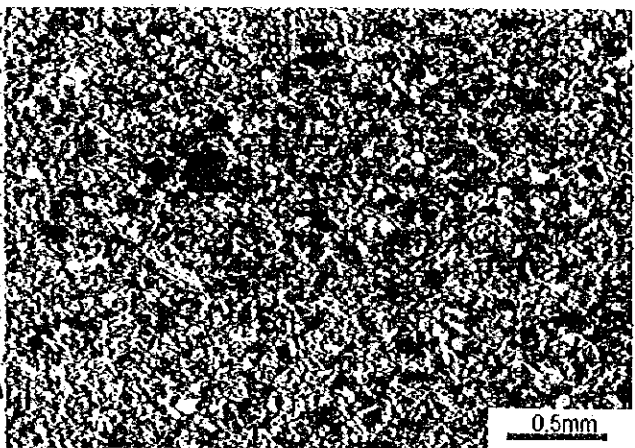
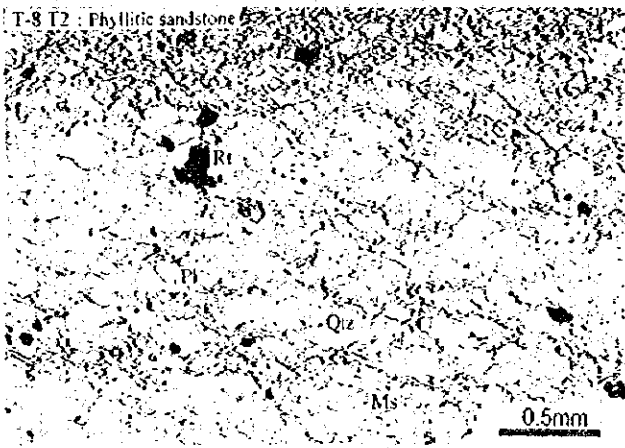
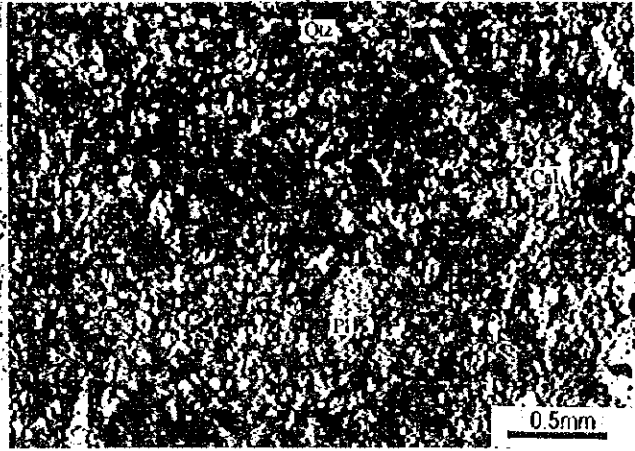
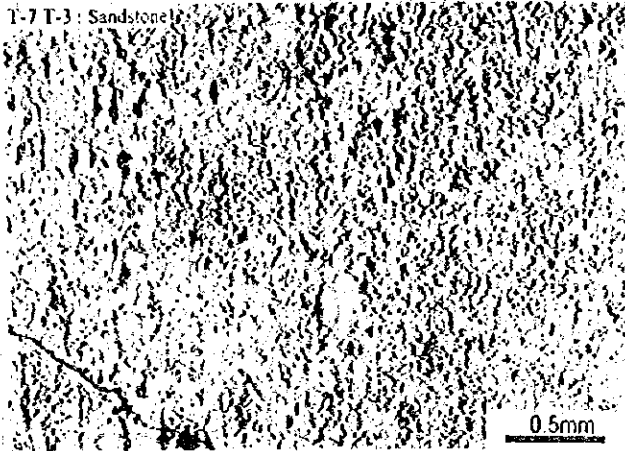
T-7 T-2 : Skarn



Appendix 2-3 Photomicrographs of the Thin Sections (11/17)

Plain polarized light

Crossed polarized light

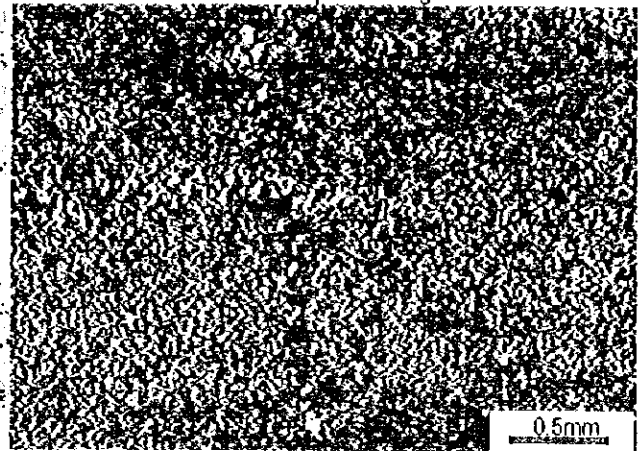
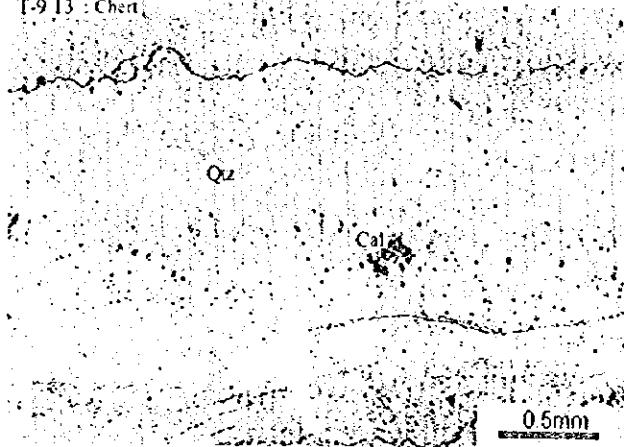


Appendix 2-3 Photomicrographs of the Thin Sections (12/17)

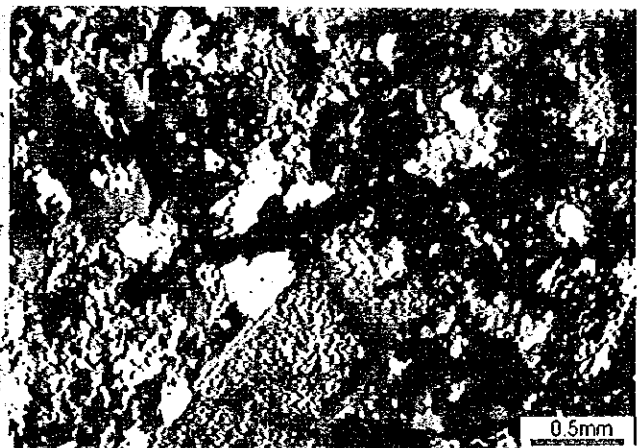
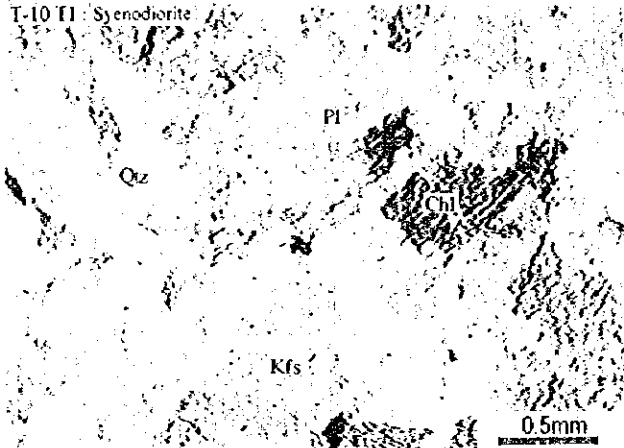
Plain polarized light

Crossed polarized light

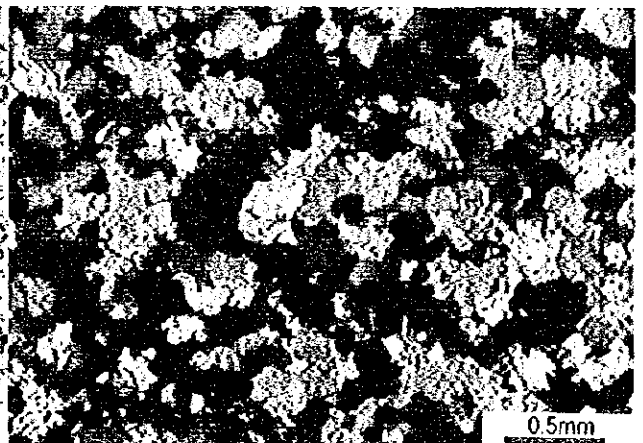
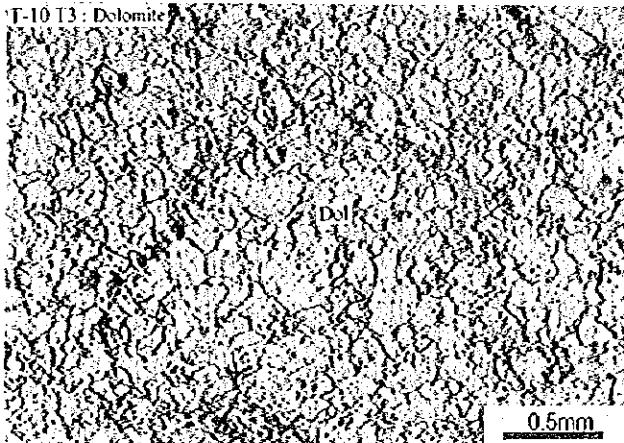
T-9 T3 : Chert



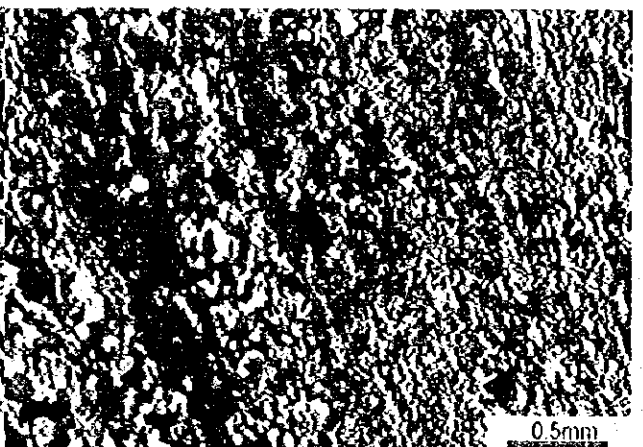
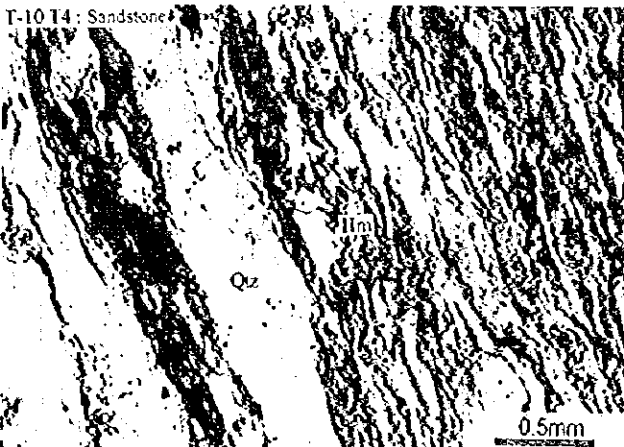
T-10 T1 : Syenodiorite



T-10 T3 : Dolomite



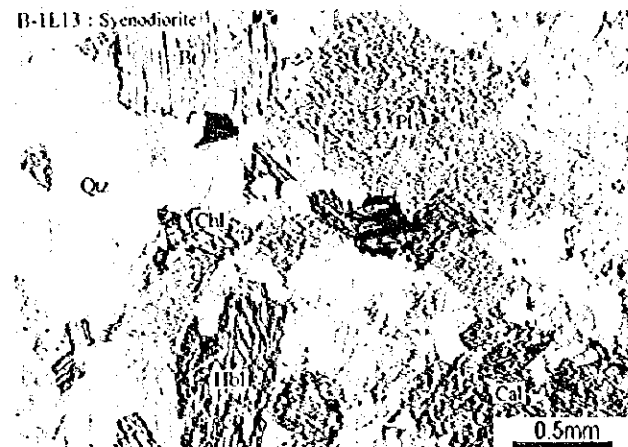
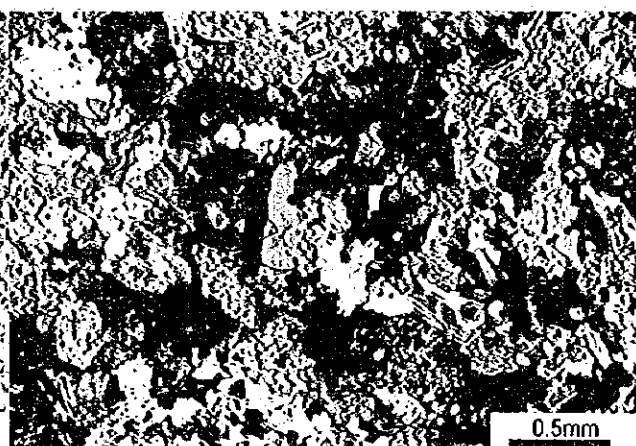
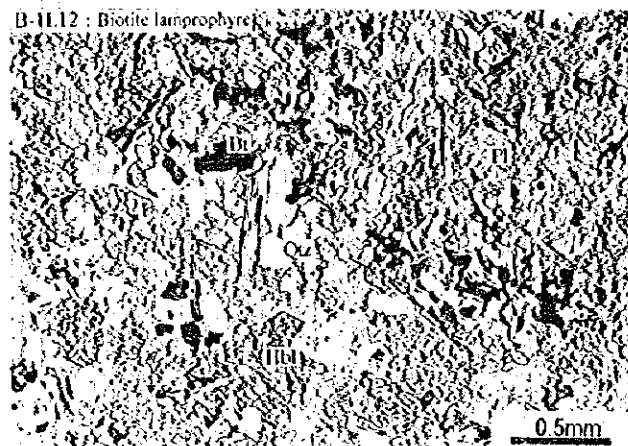
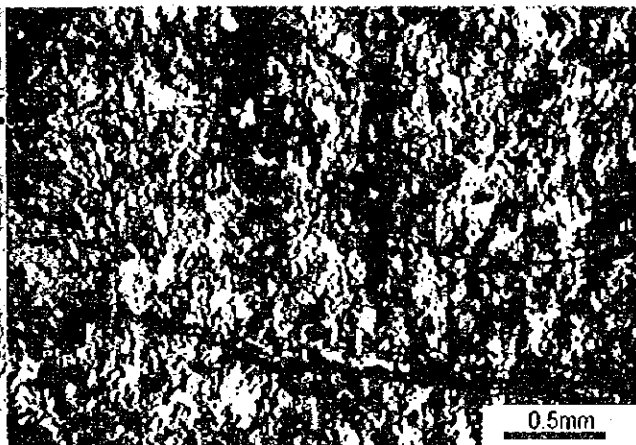
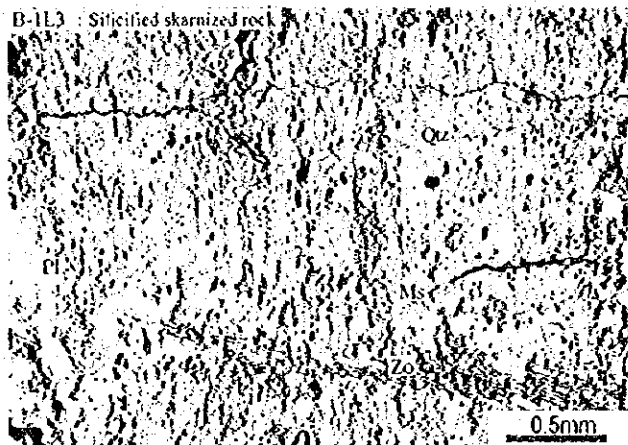
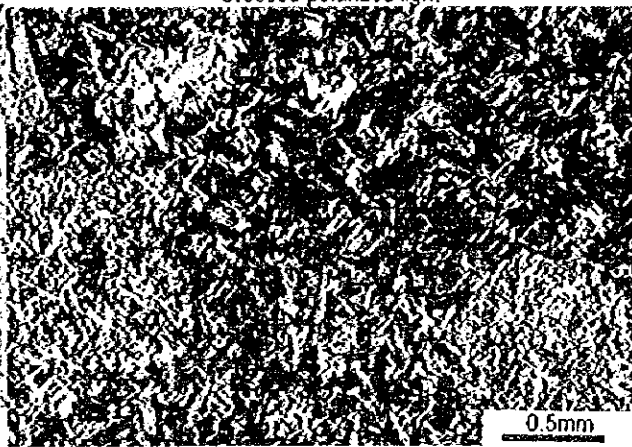
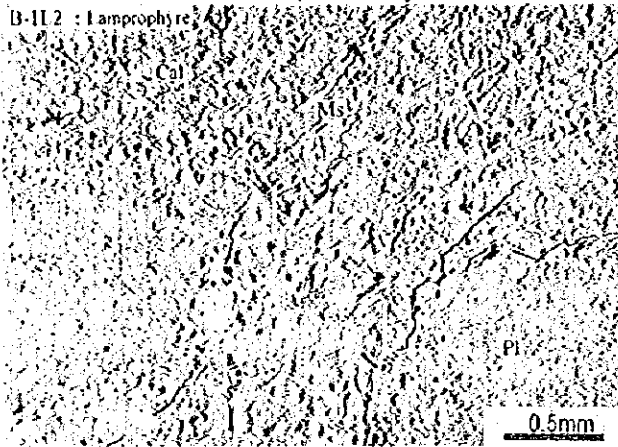
T-10 T4 : Sandstone



Appendix 2-3 Photomicrographs of the Thin Sections (13/17)

Plain polarized light

Crossed polarized light

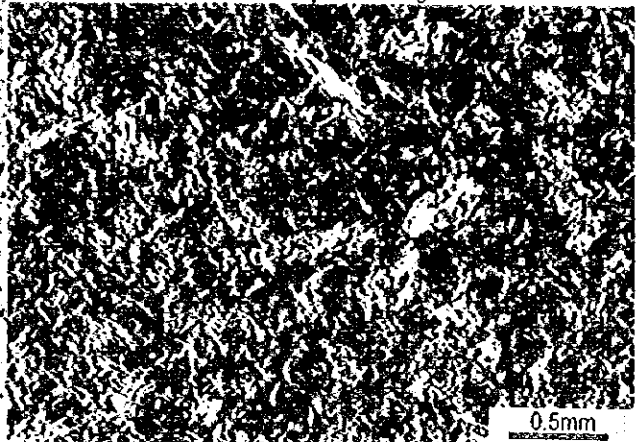
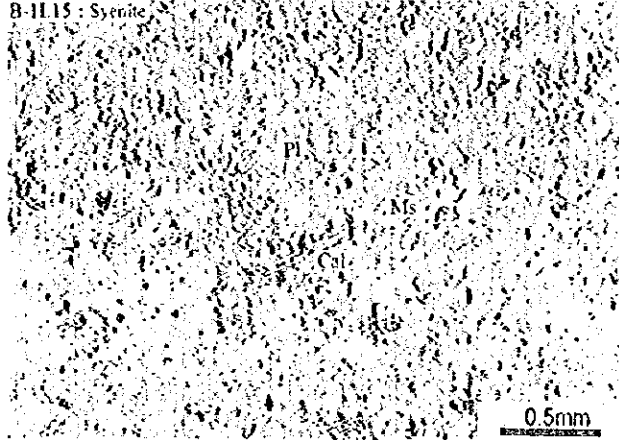


Appendix 2-3 Photomicrographs of the Thin Sections (14/17)

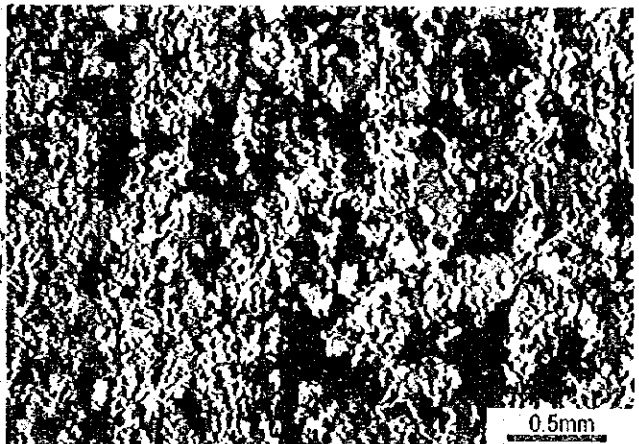
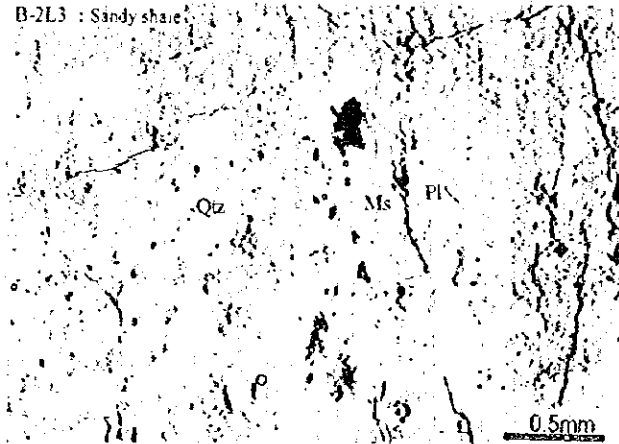
Plain polarized light

Crossed polarized light

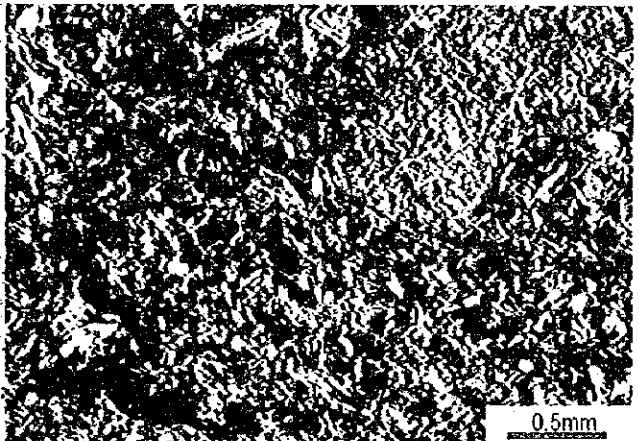
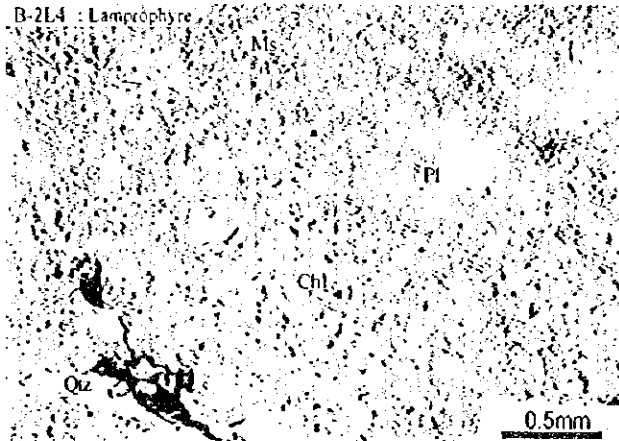
B-11.15 : Syenite



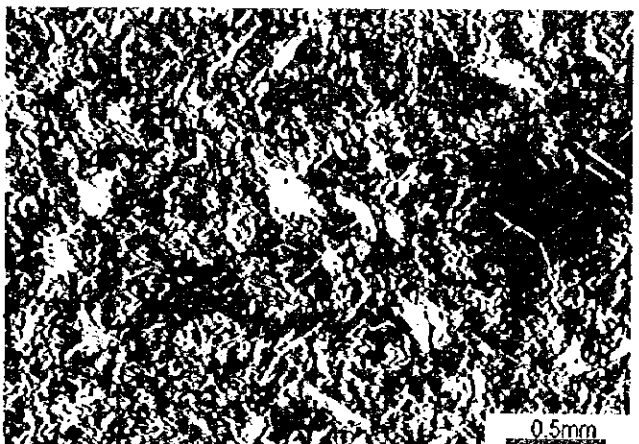
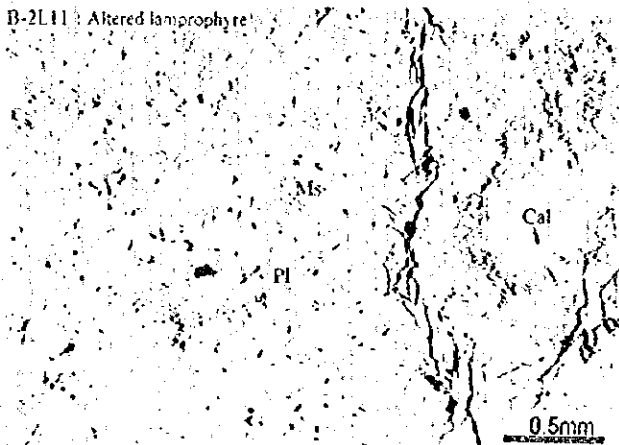
B-2L3 : Sandy shale



B-2L4 : Lamprophyre



B-2L11 : Altered lamprophyre

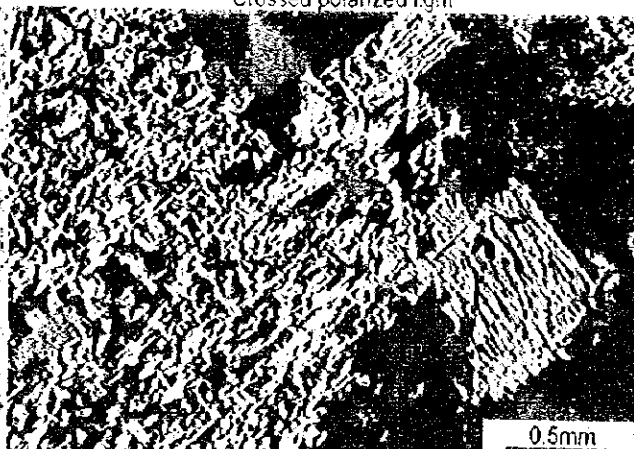
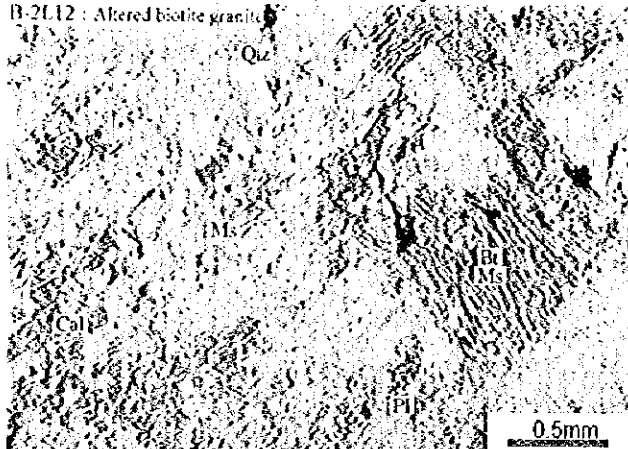


Appendix 2-3 Photomicrographs of the Thin Sections (15/17)

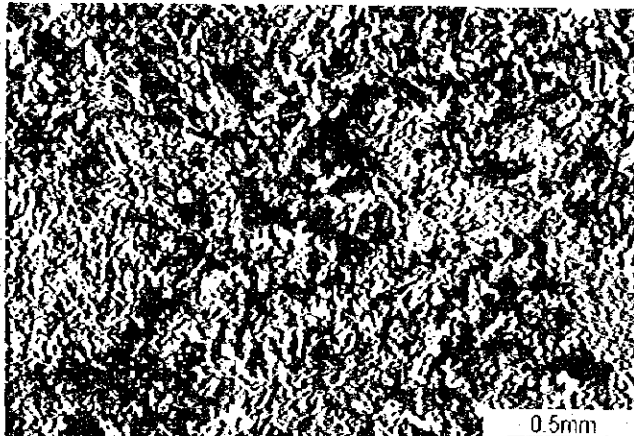
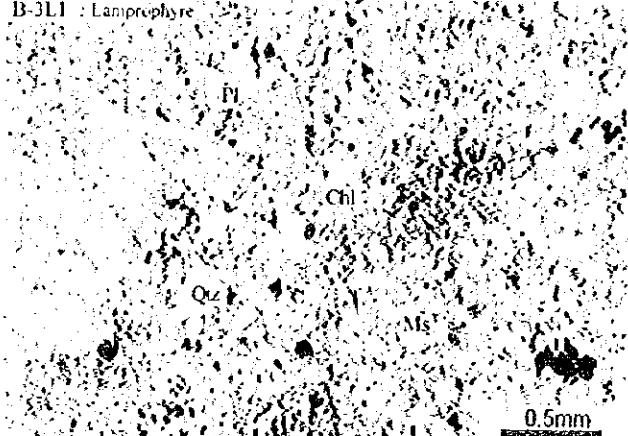
Plain polarized light

Crossed polarized light

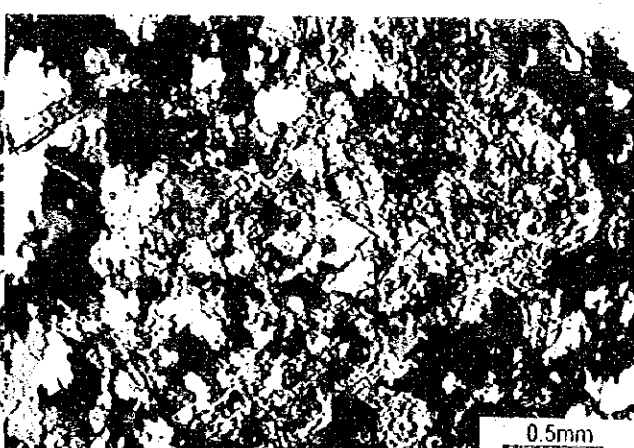
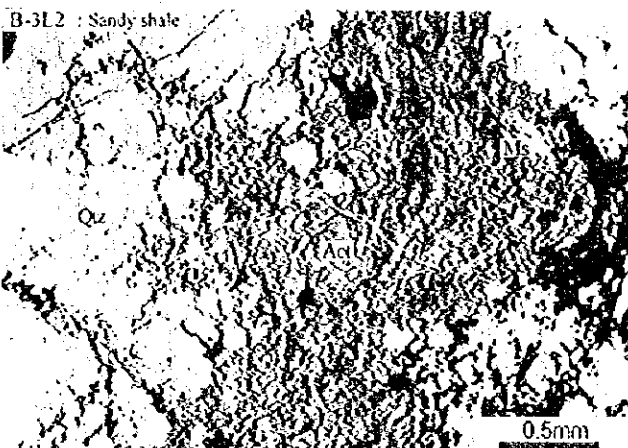
B-2L12 : Altered biotite granite



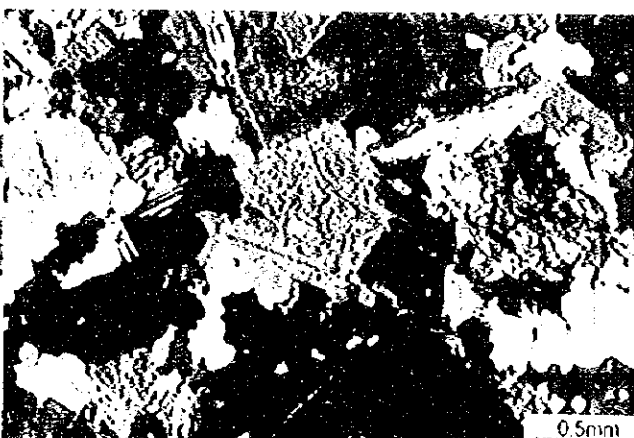
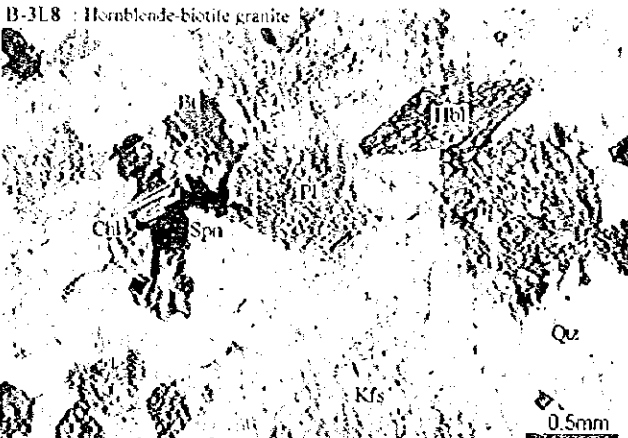
B-3L1 : Lamprophyre



B-3L2 : Sandy shale



B-3L8 : Hornblende-biotite granite

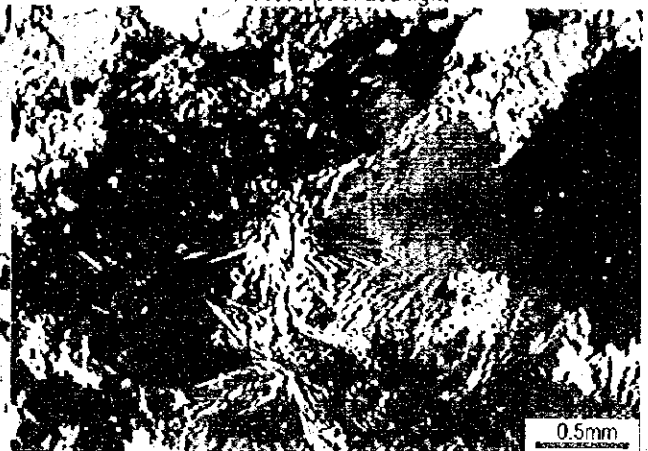
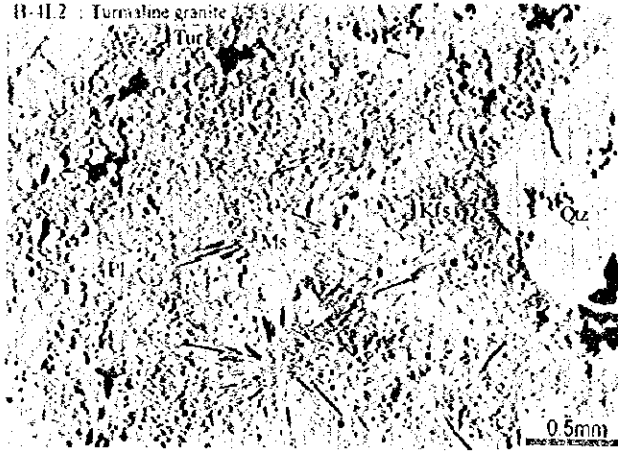


Appendix 2-3 Photomicrographs of the Thin Sections (16/17)

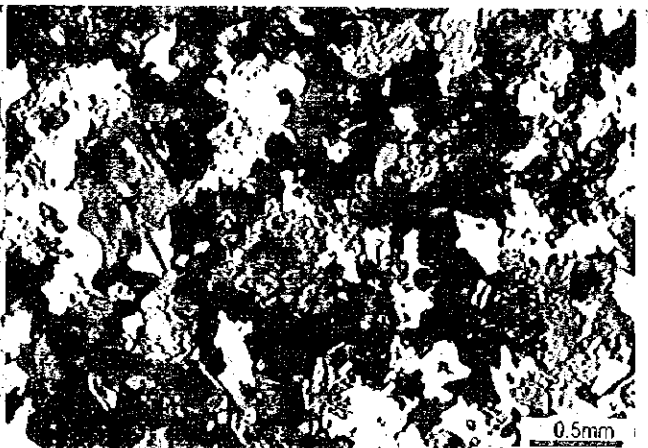
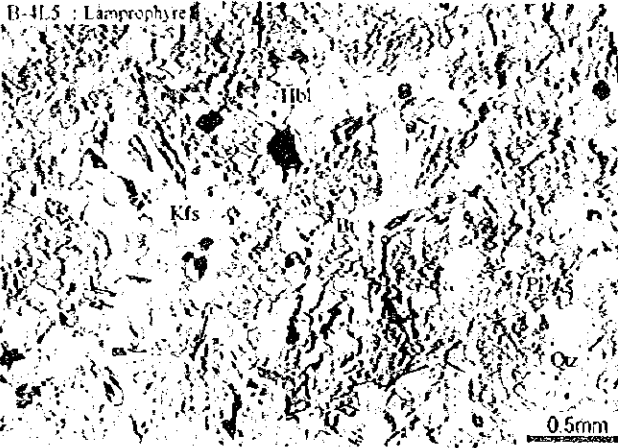
Plain polarized light

Crossed polarized light

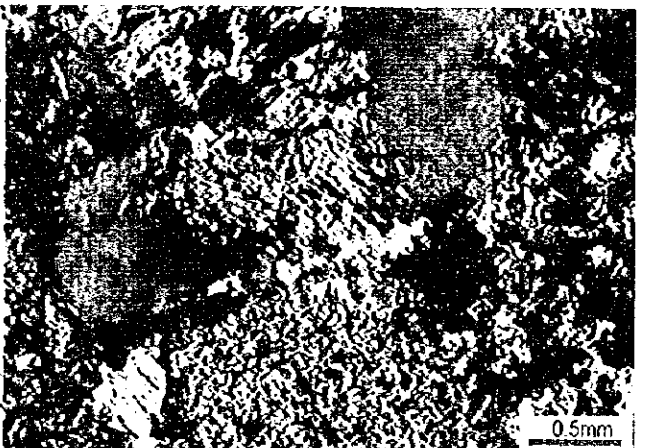
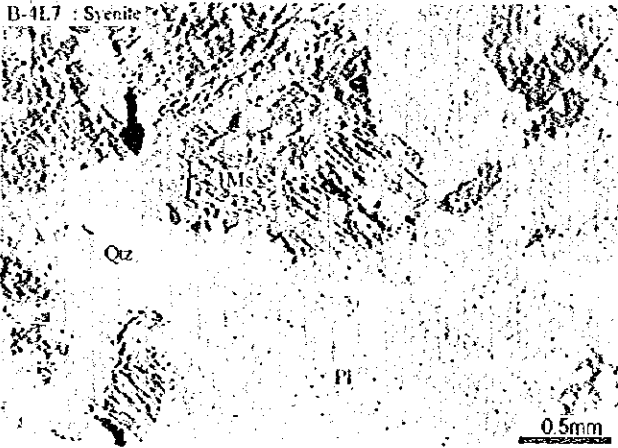
B-4L2 : Turmaline granite



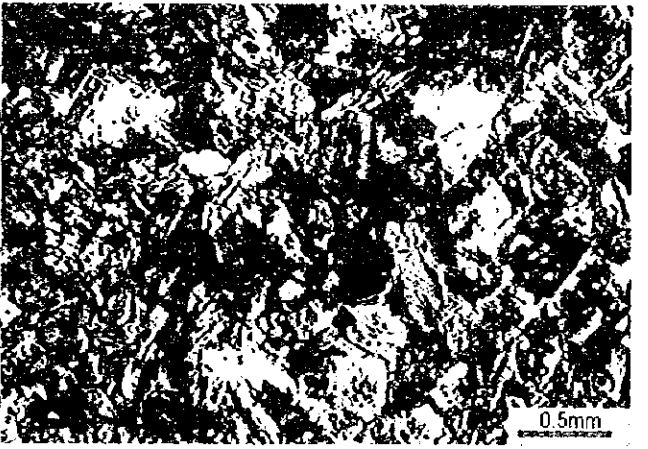
B-4L5 : Lamprophyre



B-4L7 : Syenite



B-5L2 : Lamprophyre



Appendix 2-3 Photomicrographs of the Thin Sections (17/17)

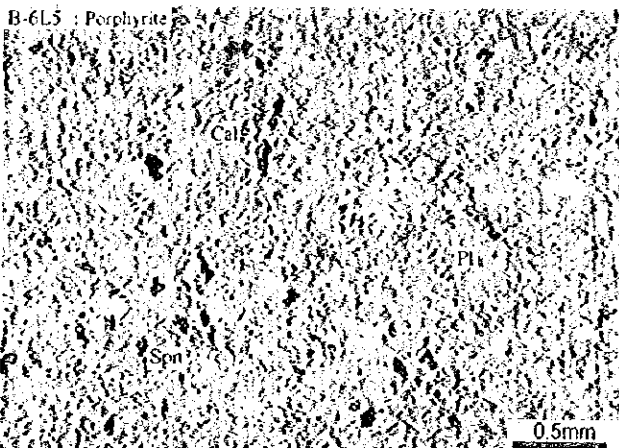
Plain polarized light

Crossed polarized light

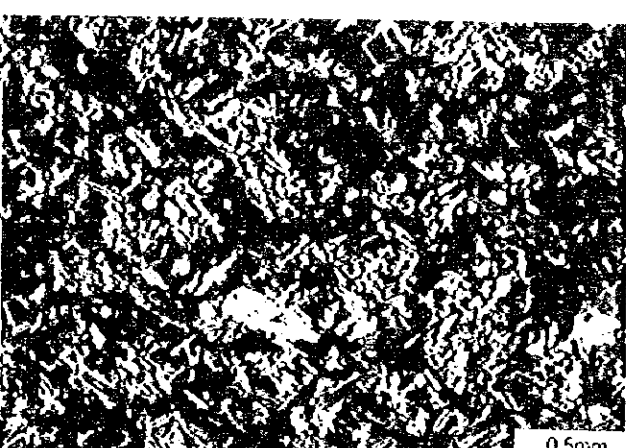
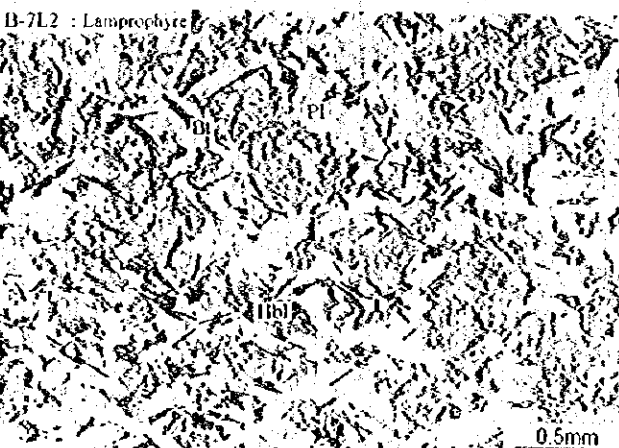
B-5L3 : Diorite



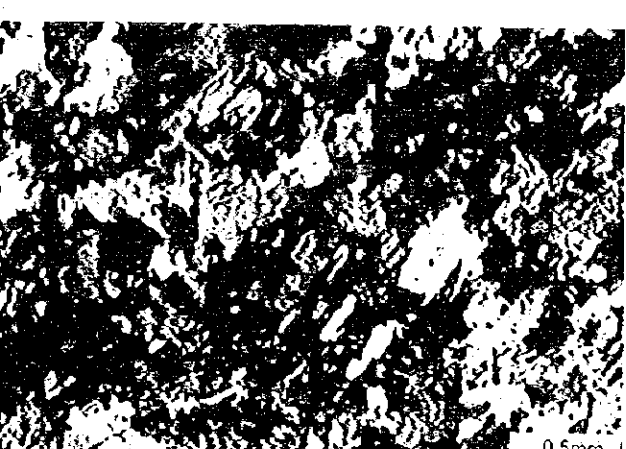
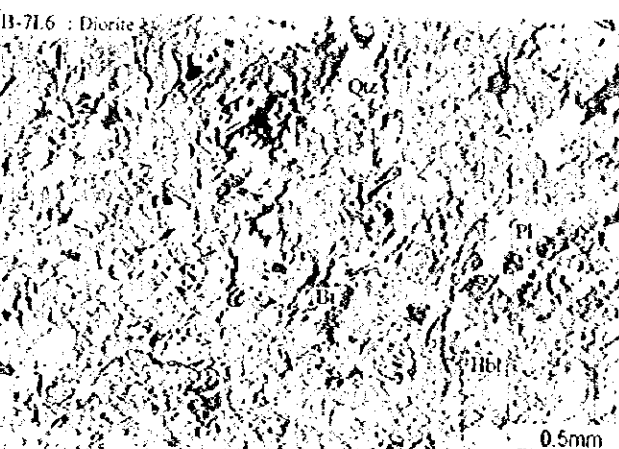
B-6L5 : Porphyrite



B-7L2 : Lamprophyre



B-7L6 : Diorite



Appendix 2-4 Microscopic Observations of the Polished Sections (1/3)

Sample No.	Locality	Field name	Minerals																						
			Pyrrhotite	Chalcopyrite	Sphalerite	Galena	Arsenopyrite	Pyrite	Native bismuth	Bismuthinite	Aikinite	Scheelite	Native gold	Graphite	Marcasite	Chalcocite	Covellite	Goethite	Lepidochrochite	Magnetite	Rutile	Fe sulfate			
1 S-1L 2	MJUS-1 138.4m	greenish grey altered shale	◎					◎																	
2 S-1L 5	MJUS-1 205.4m	grey altered silicified rock	◎	△				◎				•			○									△	
3 S-2L 6	MJUS-2 261.7m	greenish grey skarn	◎	△	•		○	○							△										
4 S-2L 9	MJUS-2 369.0m	light green skarn	◎	•					•			△													
5 S-2L 13	MJUS-2 418.2m	dark grey green skarn	◎	○				○				○													
6 S-2L 15	MJUS-2 389.2m	grey altered silicified rock	◎	•				◎				○			○										
7 S-3L 2	MJUS-3 133.9m	greenish green skarn						◎							○										
8 S-3L 6	MJUS-3 331.5m	dark green skarn	○	△				○				△			○										
9 S-3L 7	MJUS-3 361.0m	dark green skarn	◎	△				○							○										
10 S-3L 10	MJUS-3 295.4m	dark grey silicified rock	•	•				○				△			○									△	
11 S-4L 2	MJUS-4 79.5m	dark green skarn	•					◎				△			△										
12 S-4L 4	MJUS-4 214.8m	skarnized limestone			•			◎				•			△									•	
13 S-4L 7	MJUS-4 304.3m	grey skarn	•					◎				•			△										
14 S-4L 8	MJUS-4 311.7m	dark grey skarn	○	•				△				•			◎									△	
15 T-1 P1	T-1 361.8m	reddish brown oxidized sulfides																							
16 T-1 P2	T-1 361.8m	brown silicified rock																							
17 T-1 P4	T-1 930m	grey silicified rock																							
18 T-1 P5	T-1 978.5m	white brecciated quartz																							
19 T-2 P1	T-2 218m	oxidized sulfide network																							
20 T-2 P2	T-2 220m	dark grey silicified rock																							
21 T-2 P3	T-2 221.3m	brown brecciated silicified rock																							
22 T-2 P4	T-2 226.5m	greenish yellow silicified rock																							

◎ : Abundant ○ : Common △ : Poor • : Rare

Appendix 2-4 Microscopic Observations of the Polished Sections (2/3)

Sample No.	Locality	Field name	Minerals	Pyrrhotite	Chalcopyrite	Sphalerite	Galena	Arsenopyrite	Pyrite	Native bismuth	Bismuthinite	Aikinite	Scheelite	Native gold	Graphite	Marcasite	Chalcoite	Covellite	Goethite	Lepidochroite	Magnetite	Rutile	Fe sulfate
23 T-2 P5	T-2 240.5m	brownish grey silicified rock		.															⊙	○			
24 T-2 P6	T-2 245.5m	reddish brown grey silicified rock												○					△	○			
25 T-2 P7	T-2 256.9m	brownish chalcadonic rock																	△	△		.	
26 T-3 P1	T-3 192.2m	deep green-reddish brown silicified rock		.															○	△		.	
27 T-3 P2	T-3 234m	black silicified rock																	○	△			
28 T-3 P3	T-3 319m	black silicified-skarnized rock																	○	○			
29 T-3 P4	T-3 380m	black brecciated siliceous slate																	○	○			
30 T-4 P1	T-4 204.5m	gossan with grey quartz																	○	△			
31 T-4 P3	T-4 364m	reddish brown sandstone hornfels							.										△				
32 T-4 P5	T-4 171.3m	grey-brown silicified rock																	○			.	
33 T-4 P6	T-4 171.5m	grey-brown silicified rock							.										⊙	○			
34 T-5 P1	T-5 152.5m	brown silicified rock							.										⊙	△			
35 T-5 P2	T-5 339.5m	white silicified-skarnized rock																	△				
36 T-6 P1	T-6 644.5m	dark reddish brown oxidized ore																	⊙	○			
37 T-6 P2	T-6 690m	white-brown quartz																	⊙	○			
38 T-6 P4	T-6 214.5m	reddish brown silicified gossan																	⊙	⊙			
39 T-7 P1	T-7 290m	reddish brown altered sandstone							△										○	○		△	
40 T-7 P2	T-7 372.7m	dark brown-grey chalcadonic rock																	○	○			
41 T-7 P3	T-7 376m	dark brown-grey chalcadonic rock																	.	○		.	
42 T-7 P4	T-7 550.5m	reddish brown chalcadonic rock																	⊙	○			
43 T-8 P1	T-8 316.6m	grey-brown quartz							.										○	○		.	
44 T-8 P2	T-8 397.5m	brown silicified-skarnized limestone																	⊙	○			

⊙ : Abundant ○ : Common △ : Poor . : Rare

Appendix 2-4 Microscopic Observations of the Polished Sections (3/3)

Sample No.	Locality	Field name	Minerals	Pyrrhotite	Chalcopyrite	Sphalerite	Galena	Arsenopyrite	Pyrite	Native bismuth	Bismuthinite	Aikinite	Scheelite	Native gold	Graphite	Marcasite	Chalcocite	Covellite	Goethite	Lepidochrochite	Magnetite	Rutile	Fe sulfate	
45T-8 P4	T-8 444m	brown silicified gossan																						
46T-8 P5	T-8 572m	reddish brown brecciated silicified rock																	⊙	⊙				
47T-9 P2	T-9 460.8m	reddish brown silicified vein																	⊙	⊙				
48T-10 P1	T-10 410.5m	grey quartz		△															⊙	⊙				
49T-10 P2	T-10 412m	grey silicified rock		○															⊙	⊙				
50T-10 P3	T-10 817m	grey quartz		△															⊙	⊙				
51B-1L 3	MJUB-1 37.2m	silicified skarnized rock		○				○	⊙										○	○				
52B-1L 6	MJUB-1 68.5m	sulphide vein in skarn		○				○	○										○	○				
53B-1L 8	MJUB-1 84.3m	sulphide vein in skarn		△				○	○										△	△				
54B-1L 10	MJUB-1 86.5m	greenish dark grey skarn		○					⊙										○	○				
55B-2L 2	MJUB-2 31.1m	vein quartz in green skarn		○					⊙										○	○				
56B-2L 7	MJUB-2 94.1m	sulphide vein in skarn		○				○	⊙										○	○				
57B-2L 8	MJUB-2 103.9m	greenish dark grey skarn		○				○	△										○	○				
58B-2L 12	MJUB-2 166.8m	sulphide vein with altered diorite		△				○	⊙										○	○				
59B-3L 2	MJUB-3 38.8m	dark grey skarn		△				○	○										○	○				
60B-3L 5	MJUB-3 81.6m	sulphide vein in limestone		○				○	⊙										○	○				
61B-4L 3	MJUB-4 45.7m	grey silicified skarnized rock		△				○	⊙										○	○				
62B-4L 4	MJUB-4 80.5m	green skarn						○	⊙										○	○				
63B-5L 4	MJUB-5 108.1m	grey and white altered diorite						○	⊙										○	○				
64B-6L 4	MJUB-6 64.3m	green and white silicified skarnized rock		○				○	⊙										○	○				
65B-7L 1	MJUB-7 10.0m	brown chalcodony						○	⊙										○	○				
66B-7L 3	MJUB-7 50.0m	dark greenish grey skarn		○				○	⊙										○	○				
67B-7L 5	MJUB-7 66.5m	grey skarn with vein quartz		○				○	⊙										○	○				

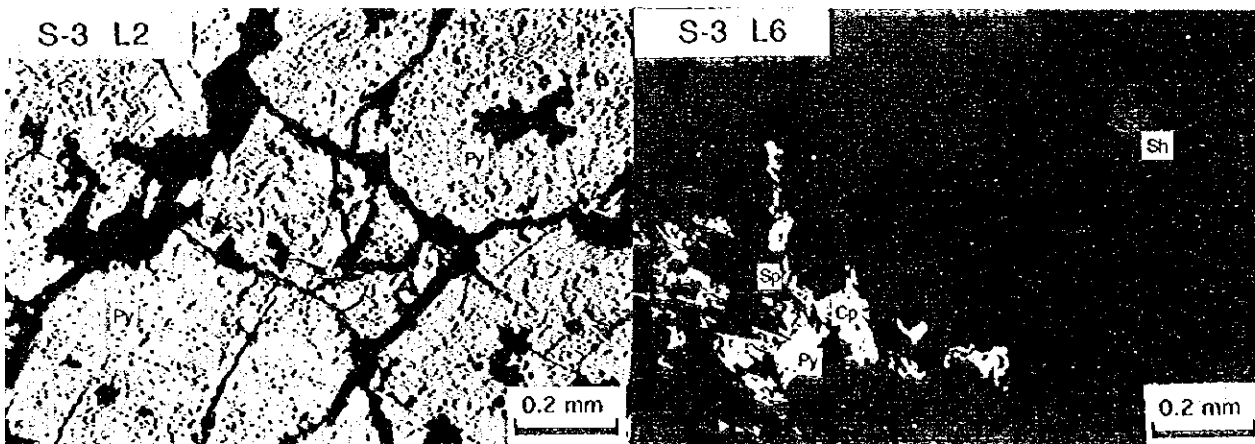
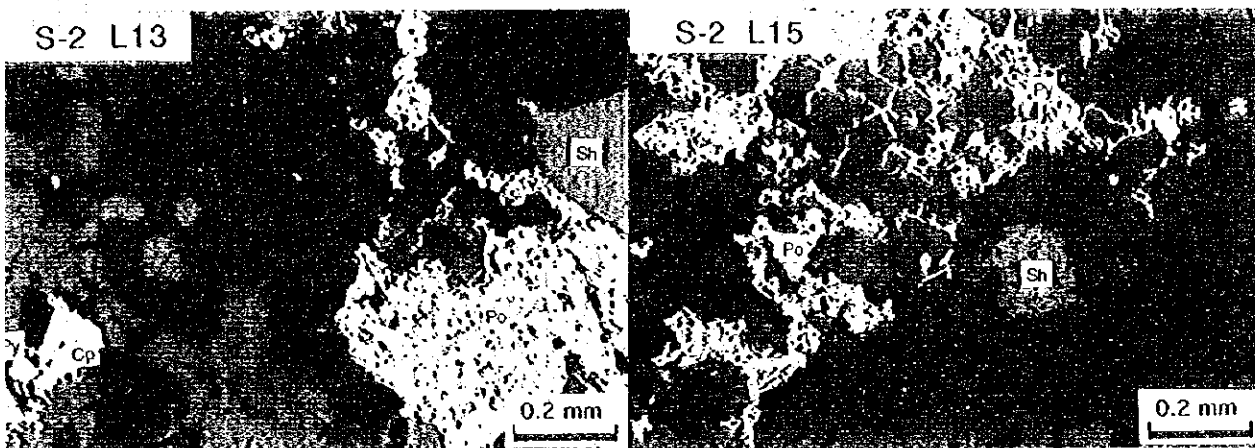
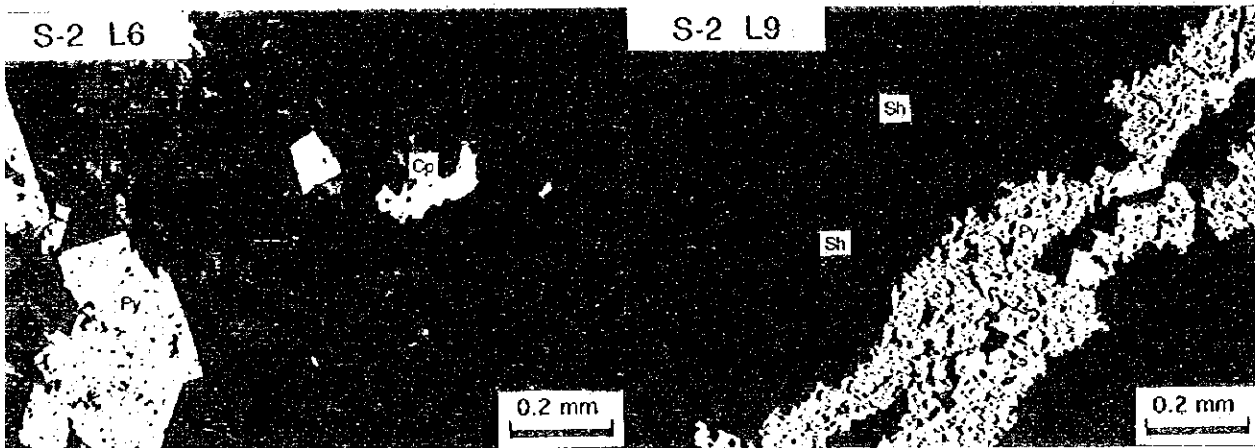
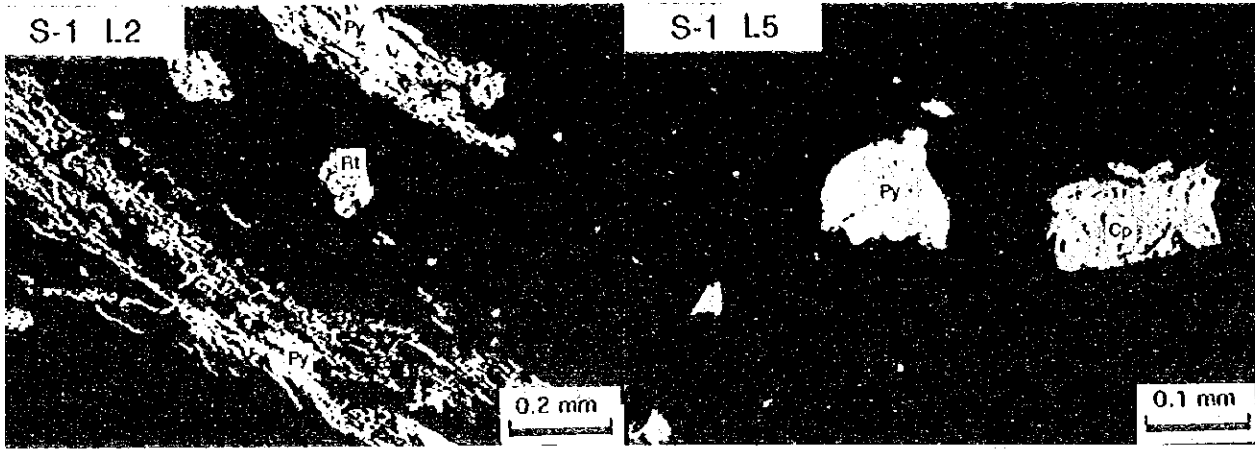
⊙ : Abundant ○ : Common △ : Poor . : Rare

Appendix 2-5 Photomicrographs of the Polished Sections

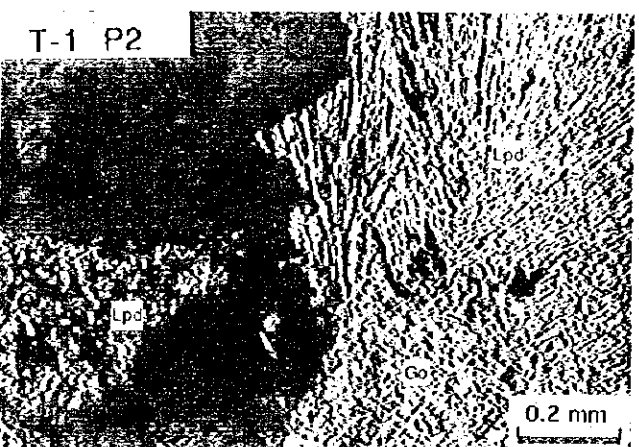
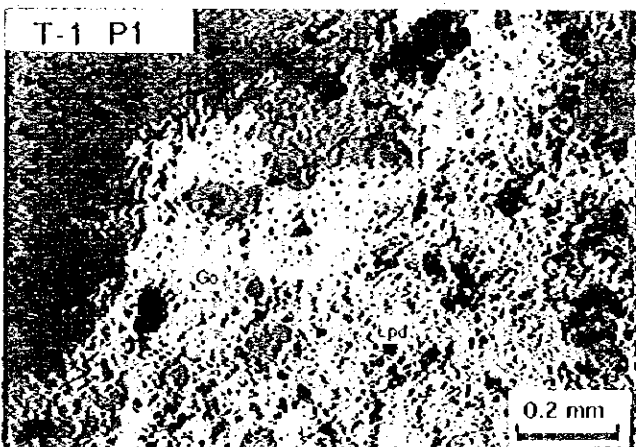
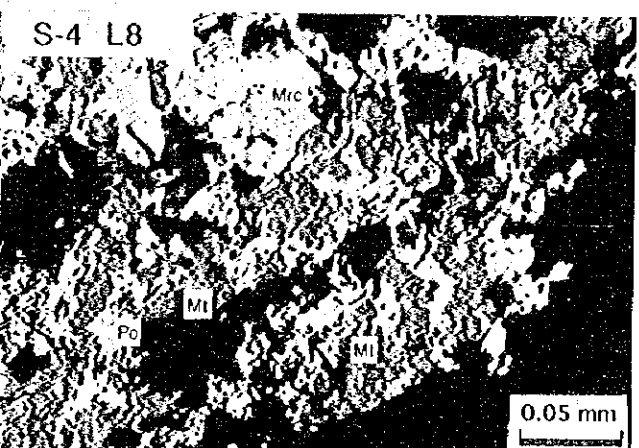
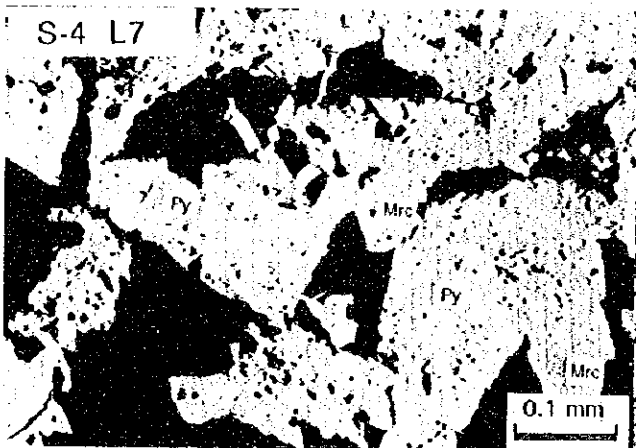
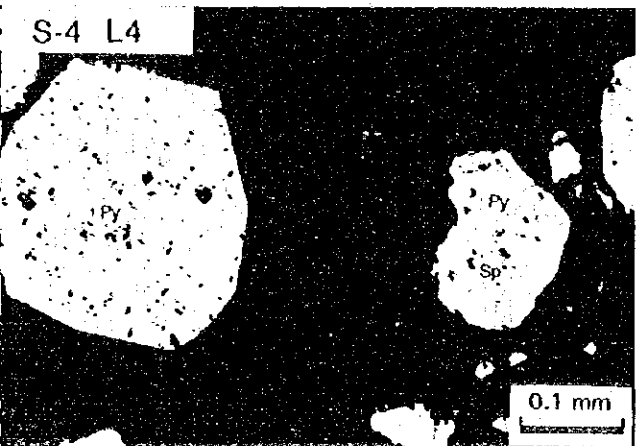
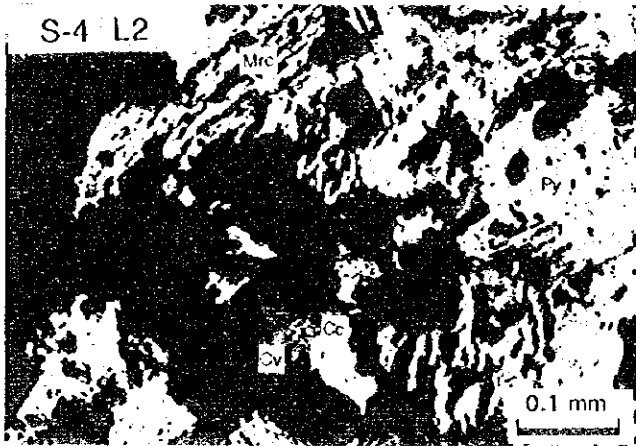
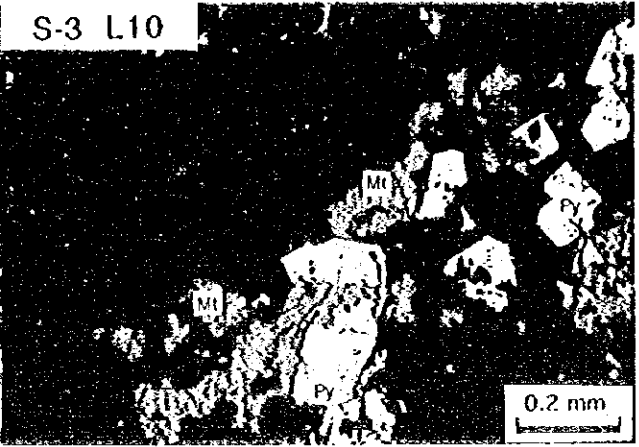
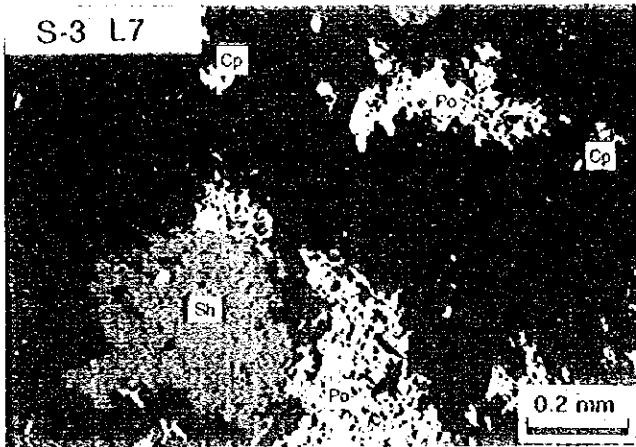
Abbreviations

Ak	:	Aikinite
Asp	:	Arsenopyrite
Au	:	Native-Gold
Bi	:	Native bismuth
Bs	:	Bismuthinite
Cc	:	Chalcocite
Cp	:	Chalcopyrite
Fe Sul	:	Fe sulfate
Ga	:	Galena
Go	:	Goethite
Grp	:	Graphite
Lpd	:	Lepidocrocite
Mrc	:	Marcasite
Mt	:	Magnetite
Po	:	Pyrrhotite
Py	:	Pyrite
Rt	:	TiO ₂ -Mineral
Sh	:	Scheelite
Sp	:	Sphalerite

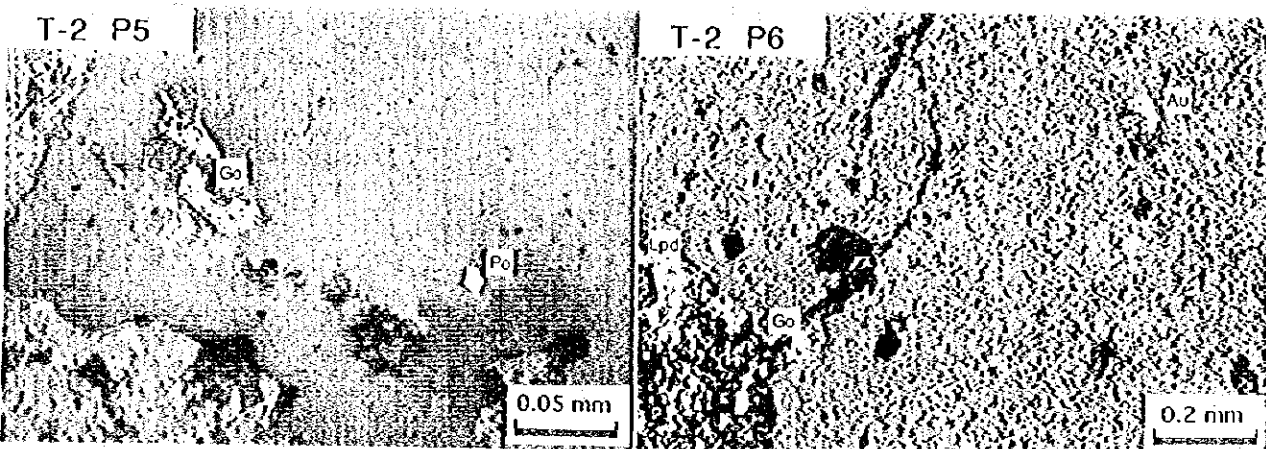
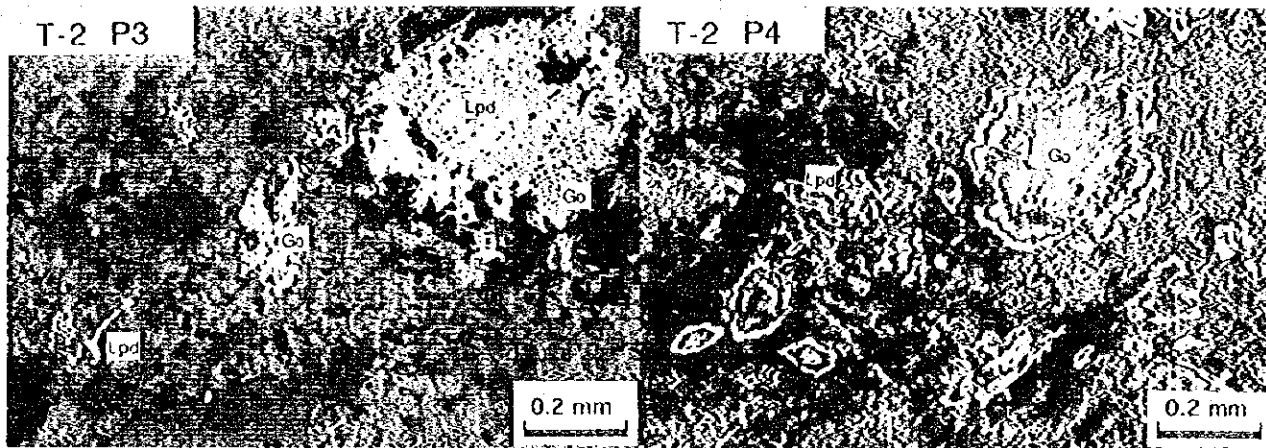
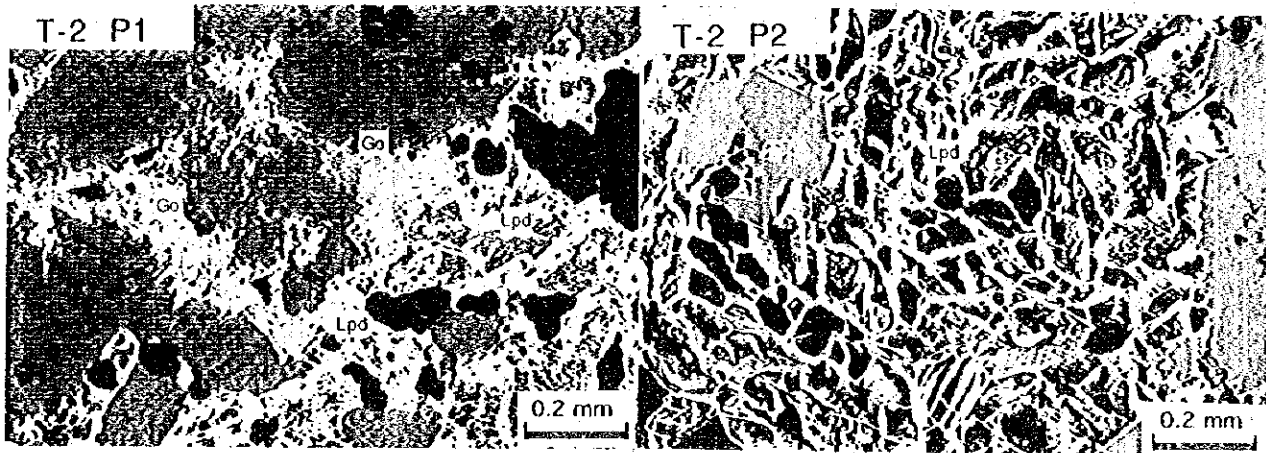
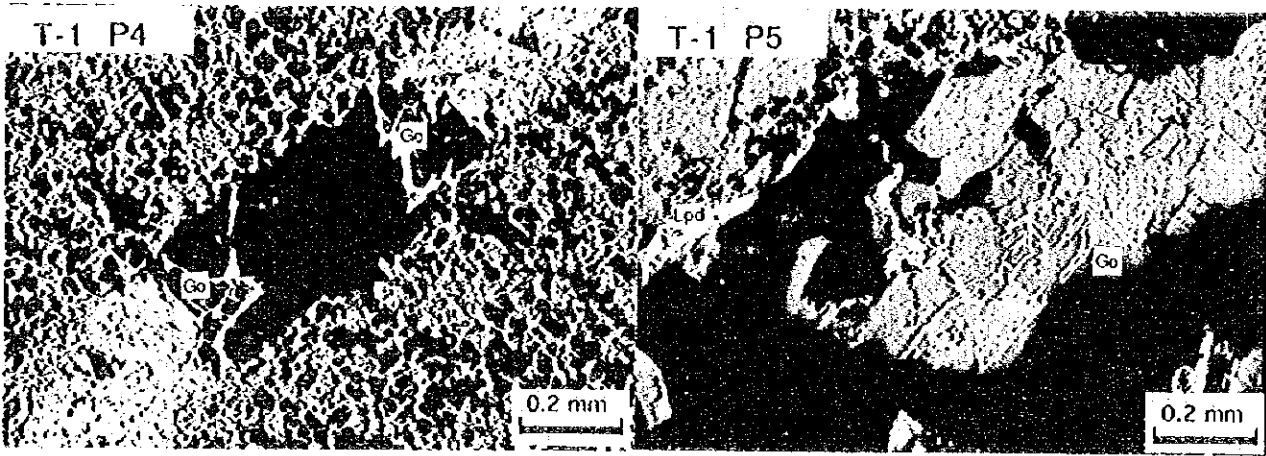
Appendix 2-5 Photomicrographs of the Polished Sections(1/9)



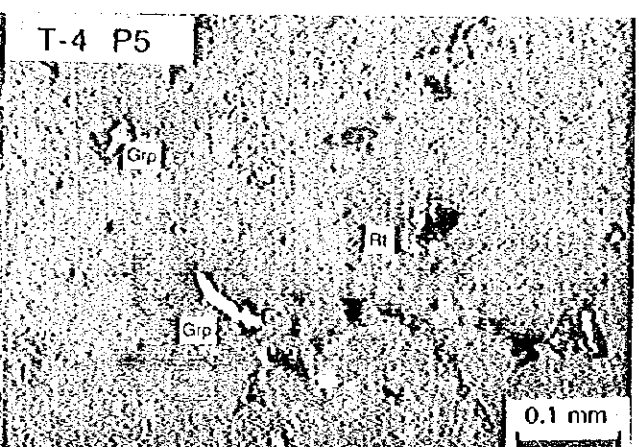
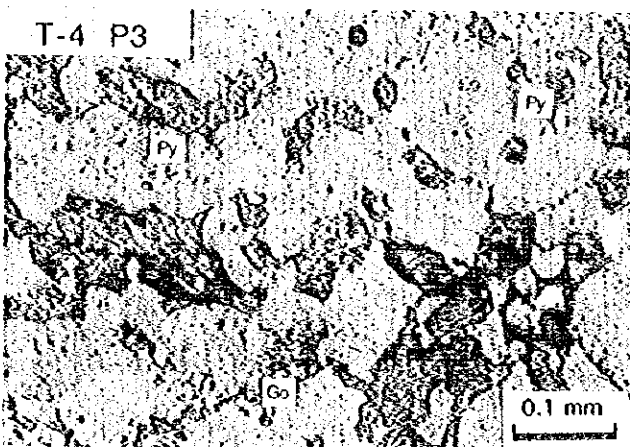
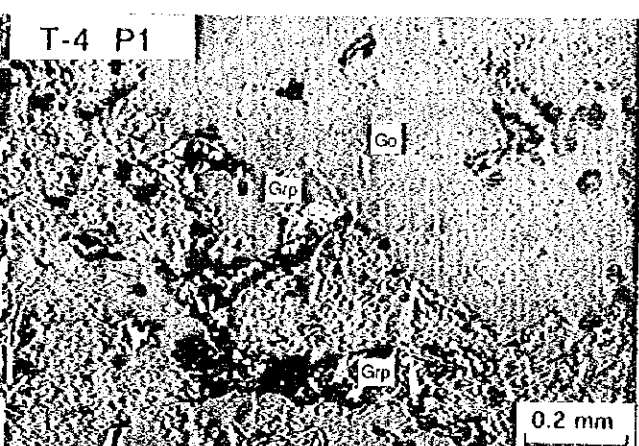
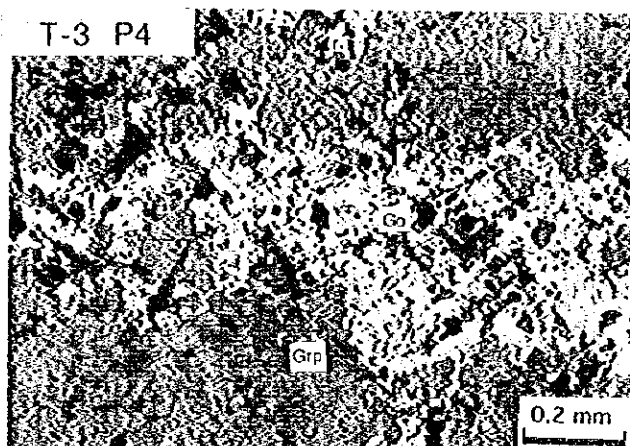
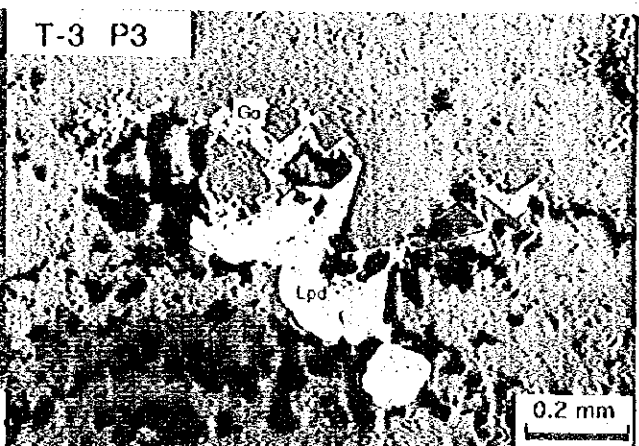
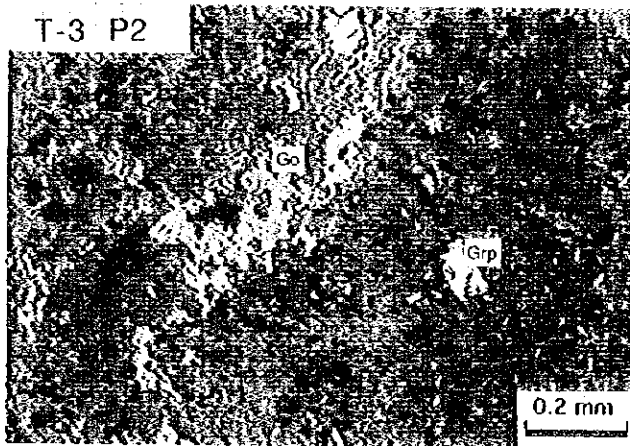
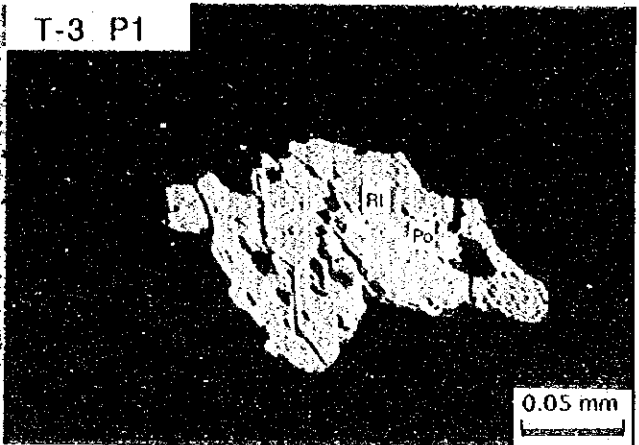
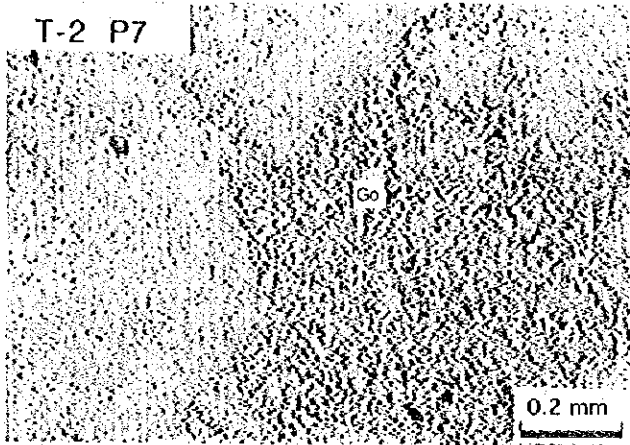
Appendix 2-5 Photomicrographs of the Polished Sections(2/9)



Appendix 2-5 Photomicrographs of the Polished Sections(3/9)



Appendix 2-5 Photomicrographs of the Polished Sections(4/9)



Appendix 2-5 Photomicrographs of the Polished Sections(5/9)

