Plate 1～12 and

Explanation of Plates

Plate 1

Photomicrographs of sandstones in the Mineoka area. Scale bar is 0.5 mm. a, c and e : open nicol, b, d and f : cross nicol.

a and b : sandstone of the Haccho Formation of the Mineoka Group (sample 00021201)

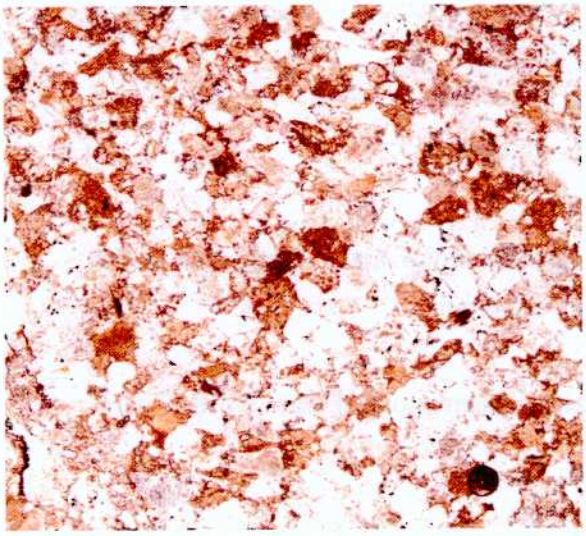
c and d : sandstone of the Fukawa Formation of the Hota Group (sample 00040908)

e and f : sandstone of the Kanigawa Formation of the Hota Group (sample 02092301)

Okuzawa, K.

Plate 1

a)



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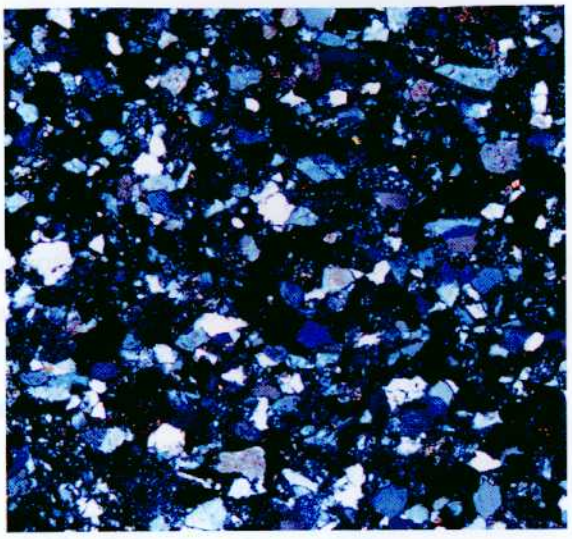

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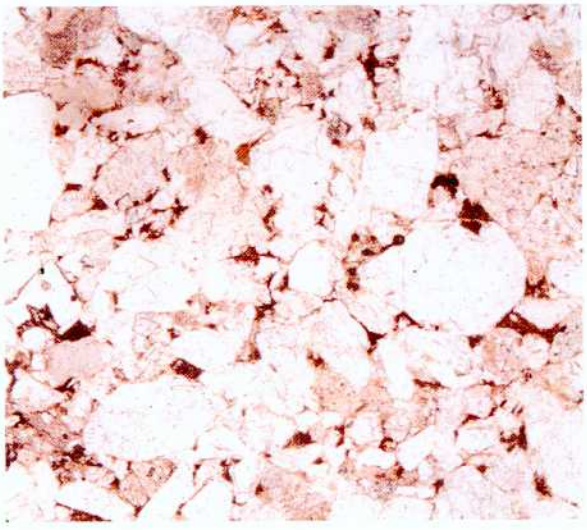

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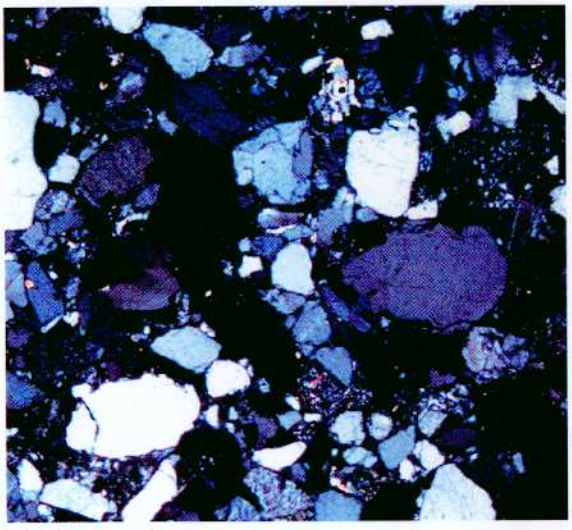

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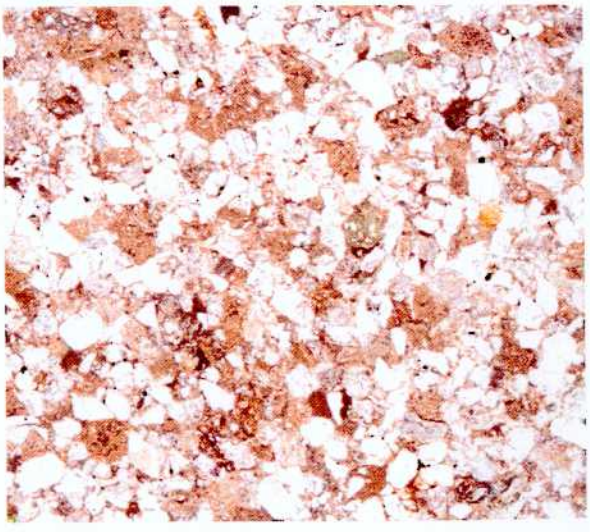

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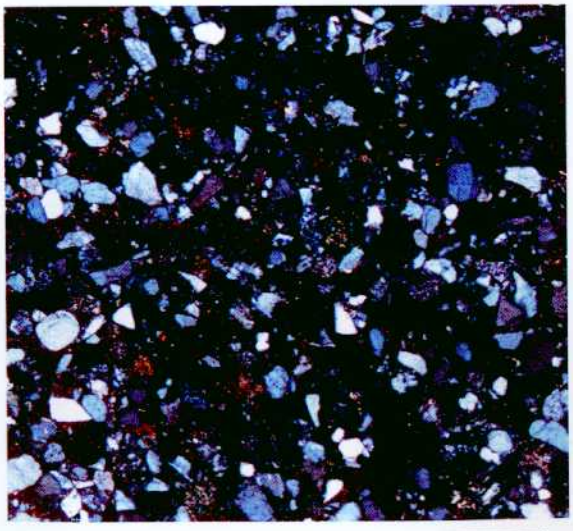


Plate 2

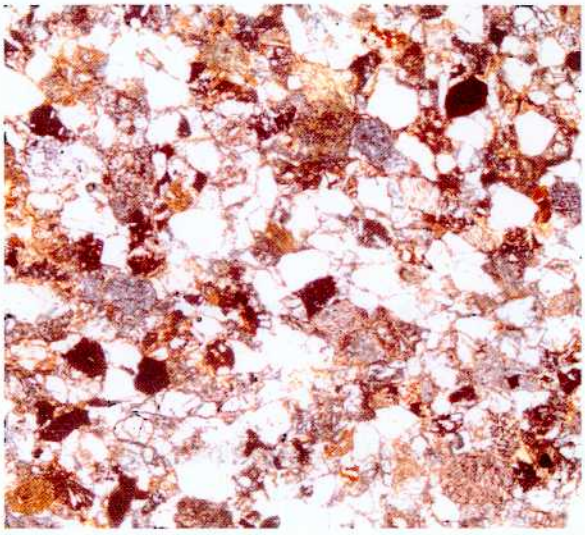
Photomicrographs of sandstones in the Mineoka area. Scale bar is 0.5 mm. a, c and e : open nicol, b, d and f : cross nicol.

a and b : sandstone of the Takazuru Formation of the Hota Group (sample 99122407)

c and d : sandstone of the Nakaobara Formation of the Sakuma Group (sample 00082101)

e and f : the leucocratic sandstone at the Yohka Beach (sample 00081805)

a)



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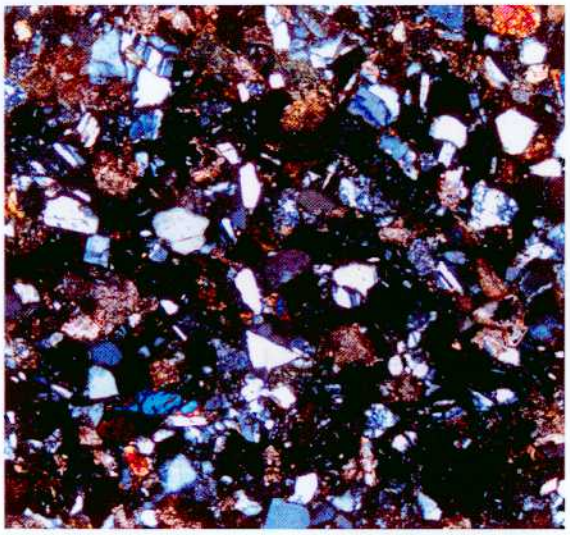

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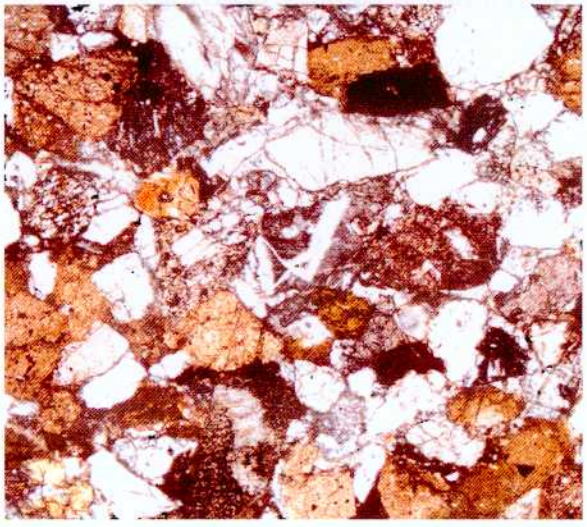

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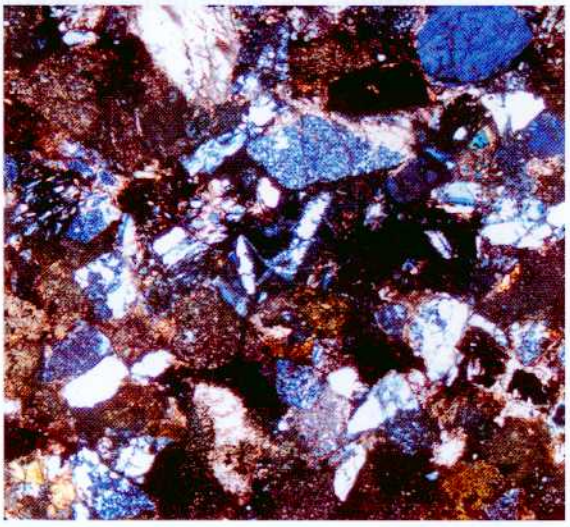

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f)

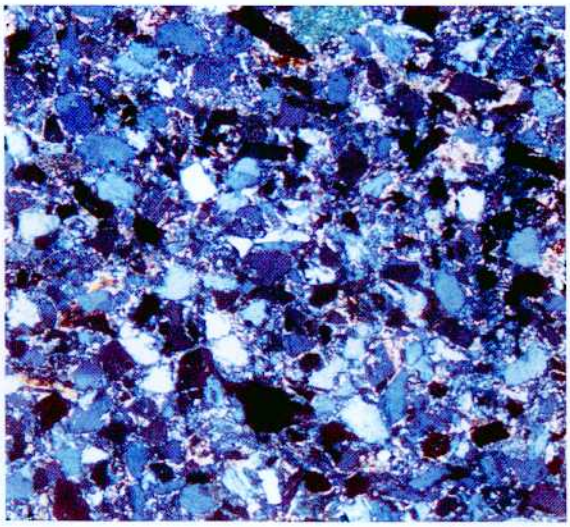


Plate 3

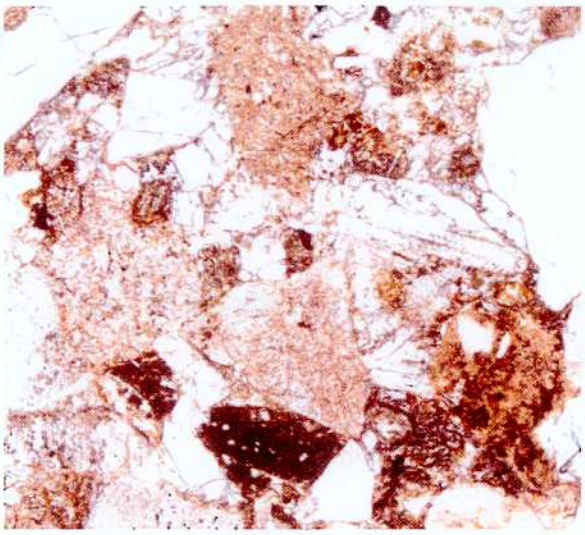
Photomicrographs of sandstones in the Mineoka area. Scale bar is 0.5 mm. a, c and e : open nicol, b, d and f : cross nicol.

a and b : sandstone of the Futatsuyama Formation (sample 00040907)

c and d : the serpentine sandstone at Mineokasengen (sample 00081811)

e and f : the serpentine sandstone at Yohka Beach (sample 00081802)

a)



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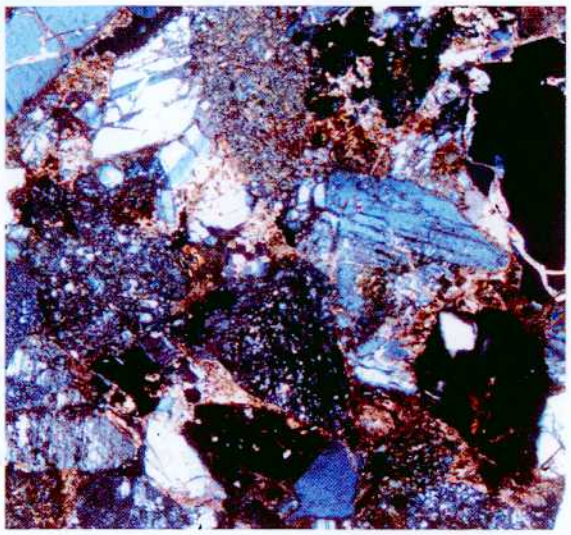

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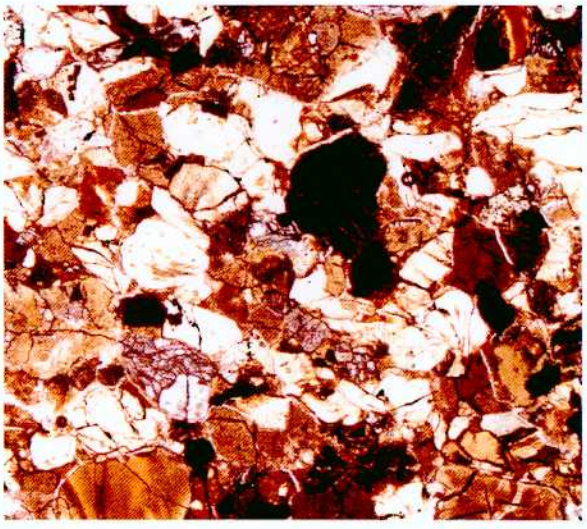

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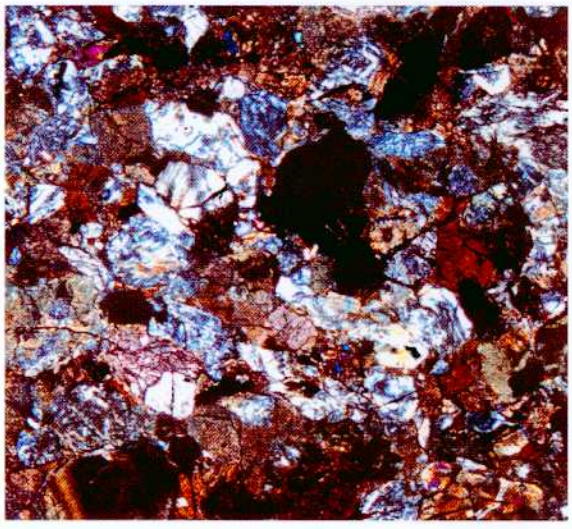

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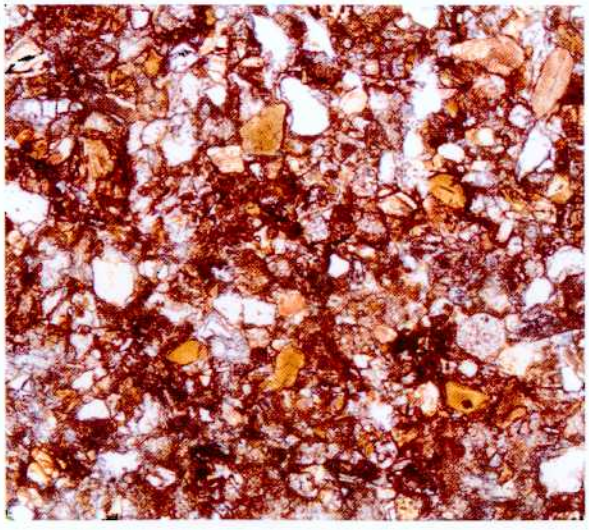


f)

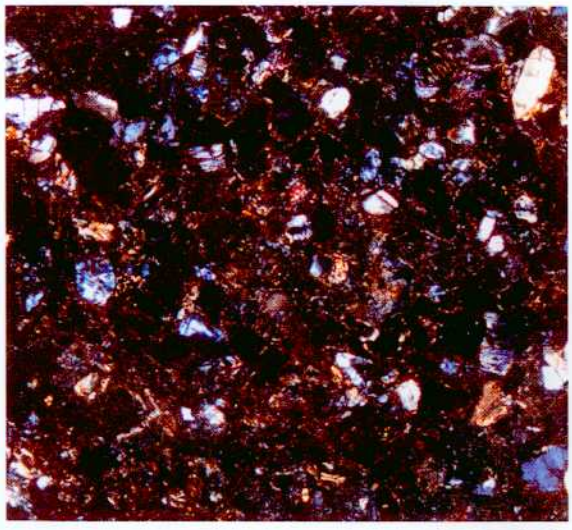


Plate 4

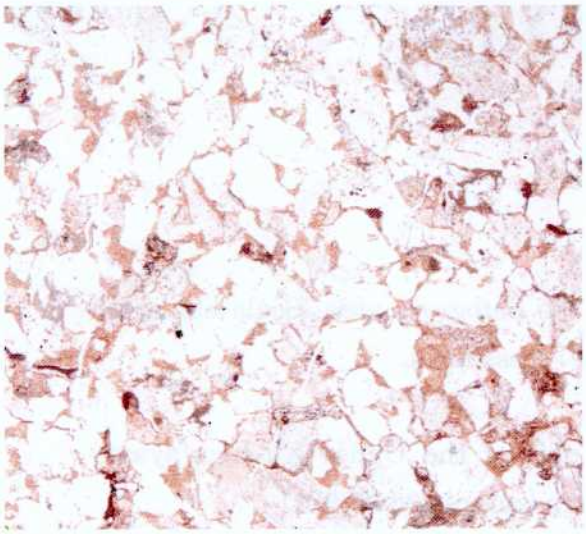
Photomicrographs of sandstones in the Setogawa area. Scale bar is 0.5 mm. a, c and e : open nicol, b, d and f : cross nicol.

a and b : sandstone of the Mikura Group (sample 02092902)

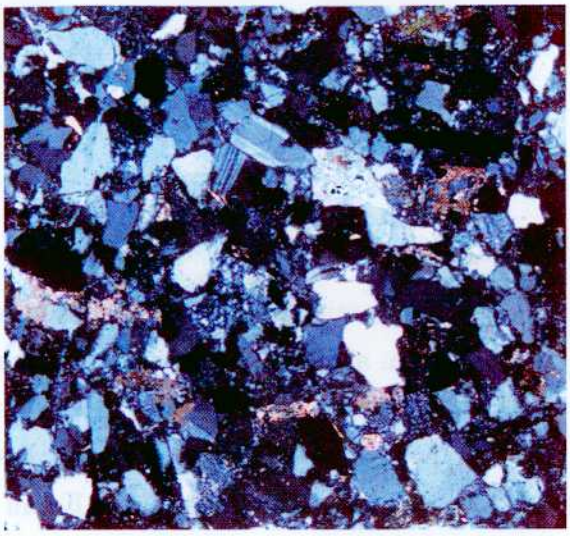
c and d : sandstone of the Takayama Thrust Sheet of the Setogawa Group (sample 02093005)

e and f : sandstone of the Amakata Sandstone of the Kurami Group (sample 02122803)

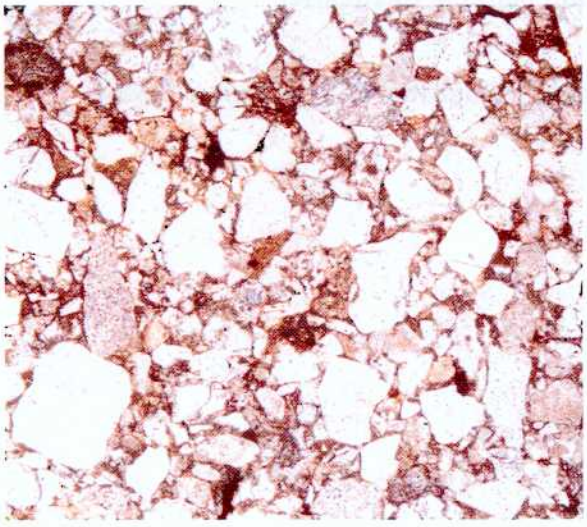
a)



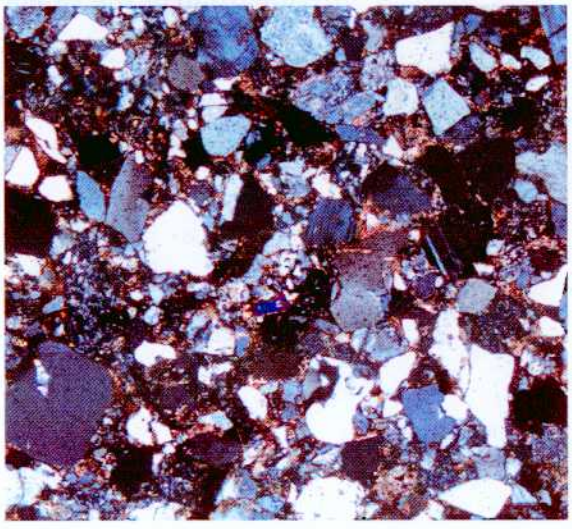
b)



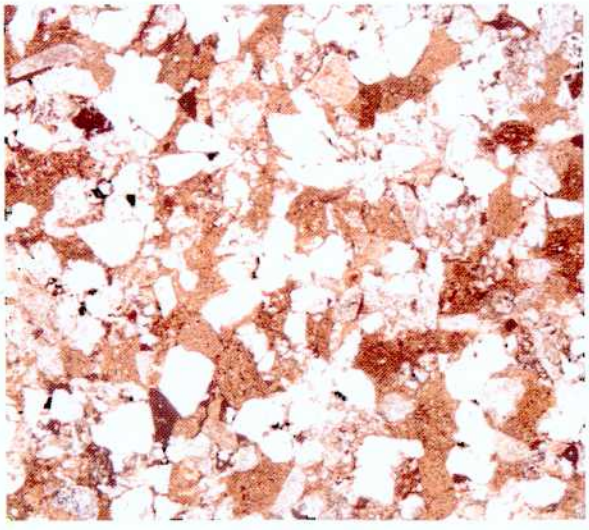
c)



d)



e)



f)

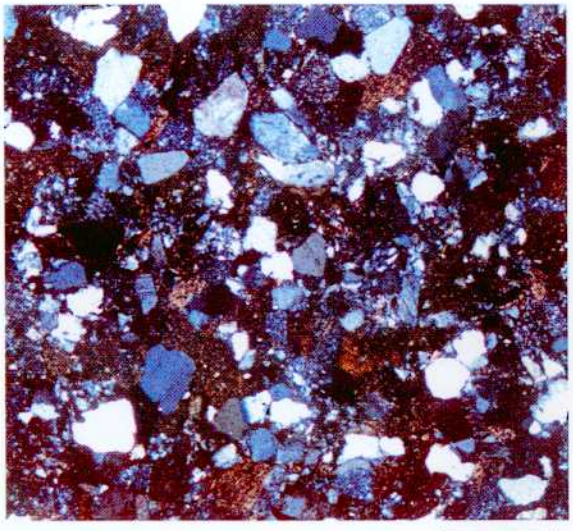


Plate 5

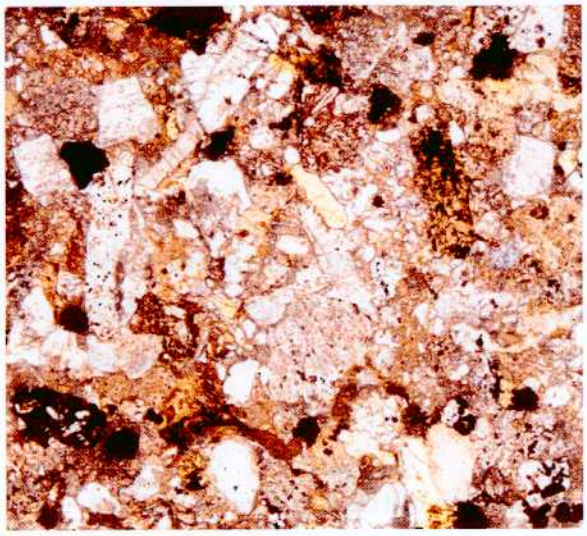
Photomicrographs of sandstones in the Setogawa area. Scale bar is 0.5 mm. a, c and e : open nicol, b, d and f : cross nicol.

a and b : sandstone of the lower part of the Upper Kushigatayama Subgroup of the Koma Group (sample 02102501)

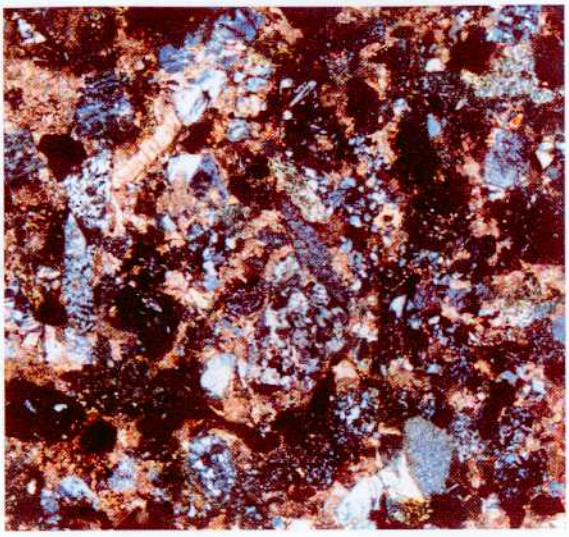
c and d : sandstone of the uppermost part of the Kushigatayama Subgroup of the Koma Group (sample 02102504)

e and f : sandstone of the Momonoki Subgroup of the Koma Group (sample 02102101)

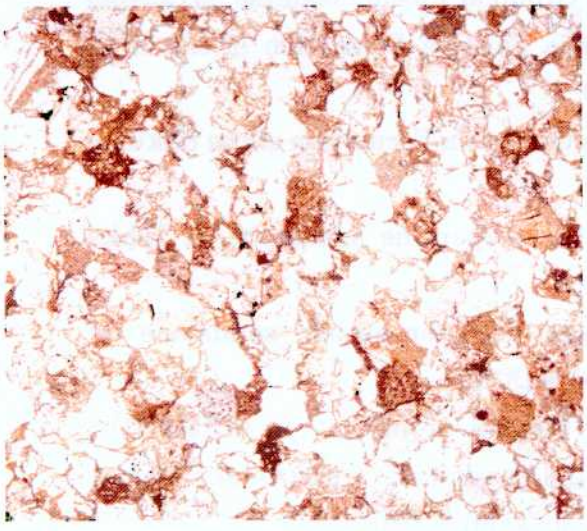
a)



b)



c)



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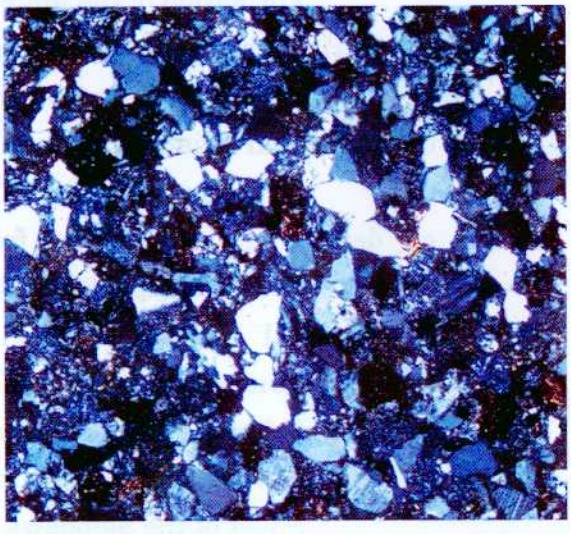

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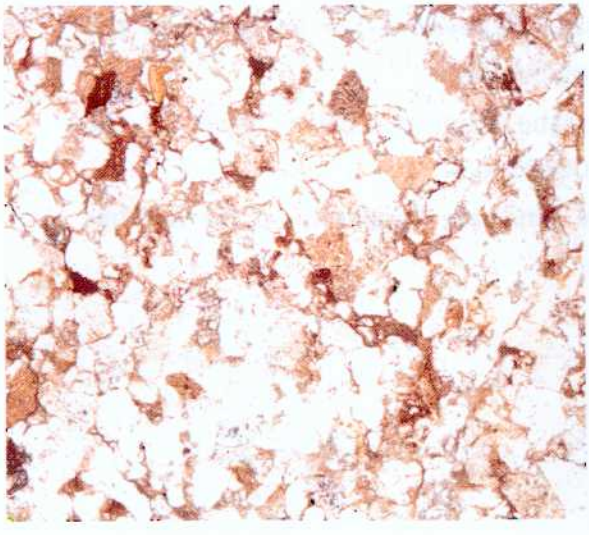


f)

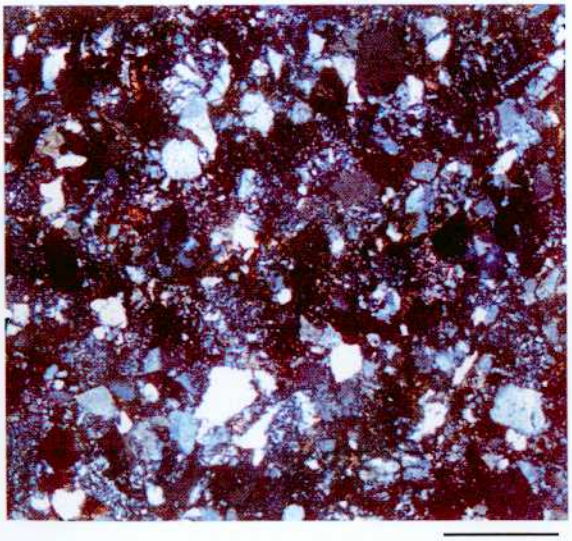


Plate 6

Photomicrographs of representative detrital chromian spinels from the Mineoka and Setogawa areas. Scale bar is 0.1 mm. Open nicol. The grains of a, c, d, g, h, k and l were obtained using heavy liquid separation.

a : detrital chromian spinel from the sandstone of the Haccho Formation of the Mineoka Group (sample 01042101).

b : detrital chromian spinel from the conglomerate of the Haccho Formation of the Mineoka Group at Fusada (sample 99122403)

c : detrital chromian spinel from the Fukawa Formation of the Hota Group. (sample 00040908)

d : detrital chromian spinel from the Okuyama Formation of the Sakuma Group (sample 00080702)

e : detrital chromian spinel from the serpentine sandstone at Yohka Beach (sample 00081802)

f : detrital chromian spinel from the serpentine sandstone at Mineokasengen (sample 00081811)

g : detrital chromian spinel from the Mikura Group (sample 02122701)

h : detrital chromian spinel from the sandstone of the Odake Thrust Sheet of the Setogawa Group (sample 03081201)

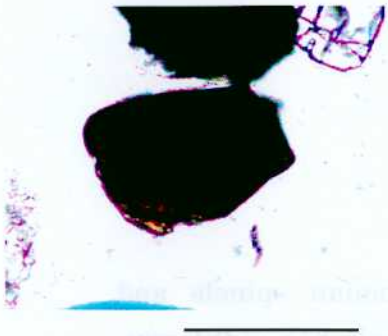
i : detrital chromian spinel from the conglomerate of the Odake Thrust Sheet of the Setogawa Group (sample 02061401)

j : detrital chromian spinel from the Takayama Thrust Sheet of the Setogawa Group (sample 02093008)

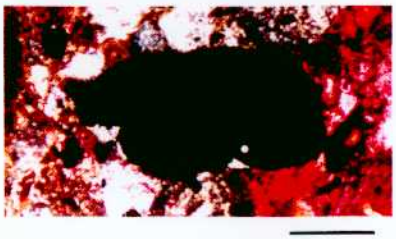
k : detrital chromian spinel from the Oigawa Thrust Sheet of the Setogawa Group (sample 02122605)

l : detrital chromian spinel from the Amakata Sandstone of the Kurami Group (sample 02122803)

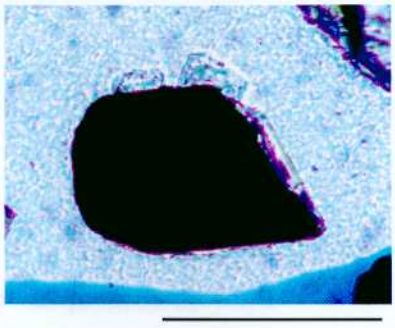
a)



b)



c)



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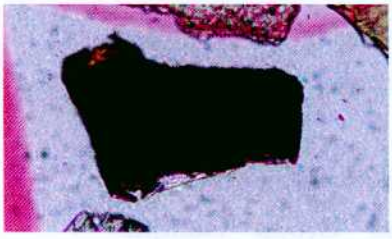

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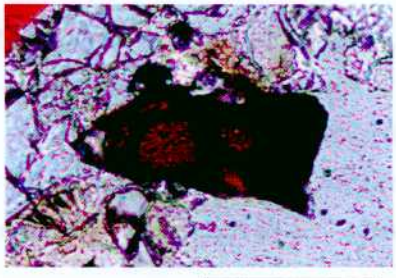
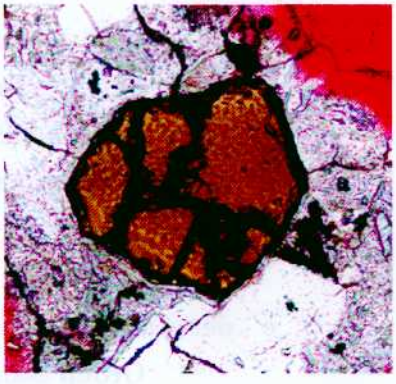
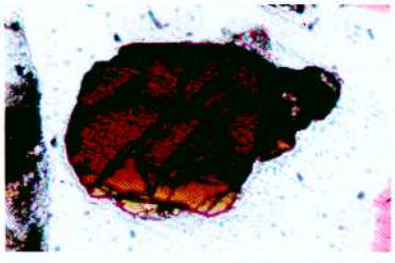


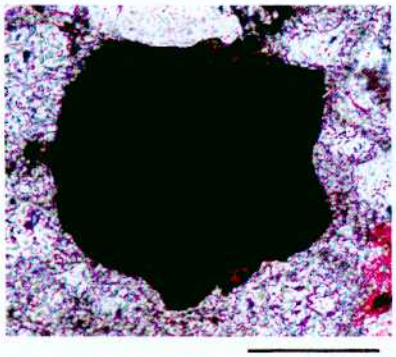
f)



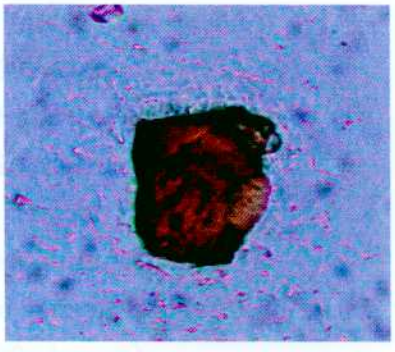
g)



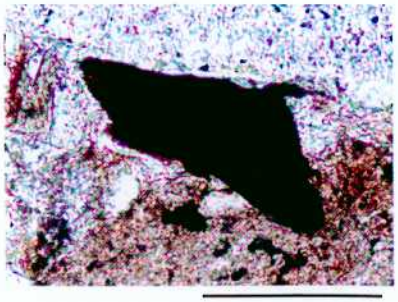
h)



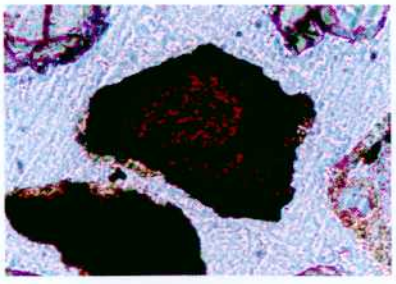
i)



j)



k)



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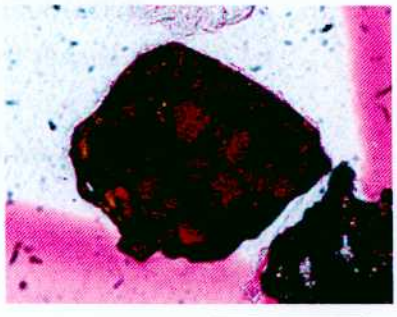


Plate 7

Photomicrographs of representative detrital chromian spinels and garnets from the Mineoka and Setogawa areas. Scale bar is 0.1 mm. Open nicol. The grains of b, d, e, f, g, h, i, k and l were obtained using heavy liquid separation.

a : detrital chromian spinel from the conglomerate block of the upper part of the Kushigatayama Subgroup of the Koma Group (sample 02102509)

b : detrital chromian spinel from the sandstone of the upper part of the Kushigatayama Subgroup of the Koma Group (sample 02102504)

c : detrital chromian spinel from the Momonoki Subgroup of the Koma Group (sample 02102101)

d : detrital garnet from the sandstone of the Haccho Formation of the Mineoka Group (sample 01042101)

e : detrital garnet from the Fukawa Formation of the Hota Group (sample 00040908)

f : detrital garnet from the Kanigawa Formation of the Hota Group (sample 02092301)

g : detrital garnet from the Takazuru Formation of the Hota Group (sample 99122407)

h : detrital garnet from the Okuyama Formation of the Sakuma Group (sample 00080702)

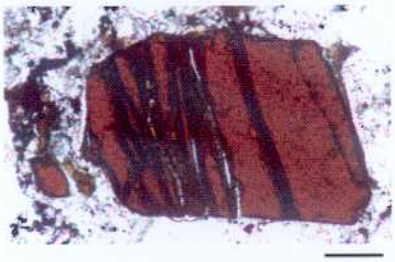
i : detrital garnet from the Futatsuyama Formation (sample 00040907)

j : detrital garnet from the leucocratic sandstone at Yohka Beach (sample 00081805)

k : detrital garnet from the Mikura Group (sample 02122701)

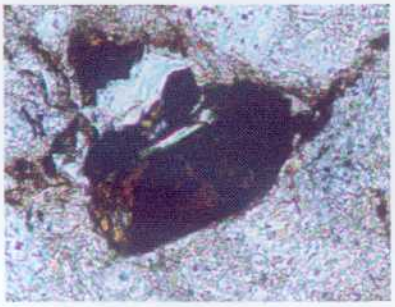
l : detrital garnet from the sandstone of the Odake Thrust Sheet of the Setogawa Group (sample 03081201)

a)

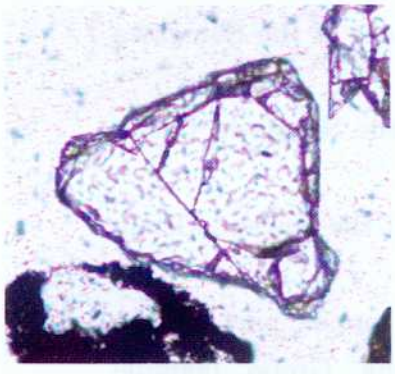


b)

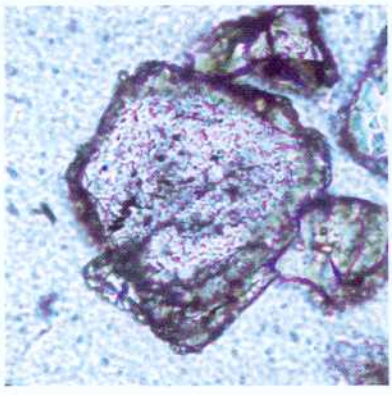
c)



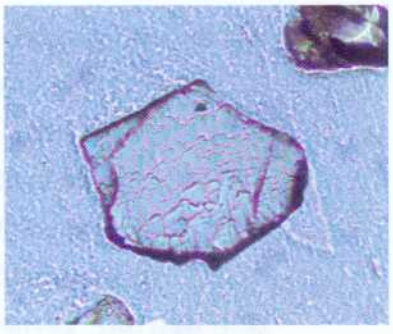
d)



e)

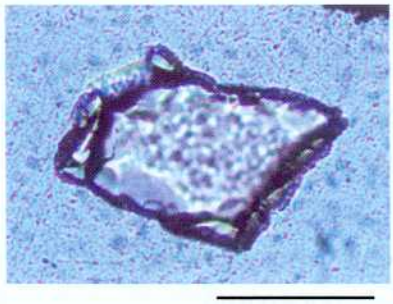


f)

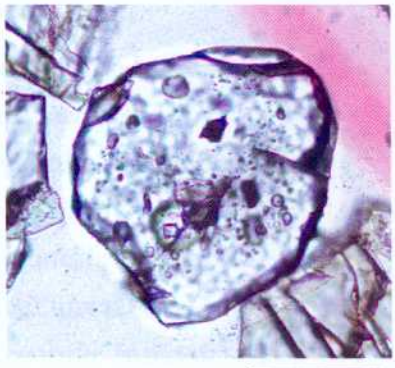


g)

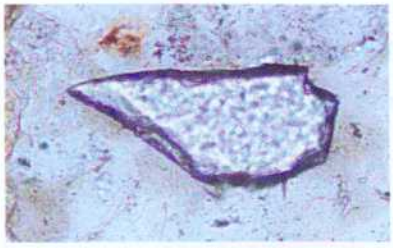
h)



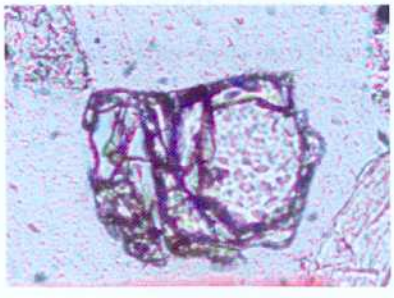
i)



j)



k)



l)

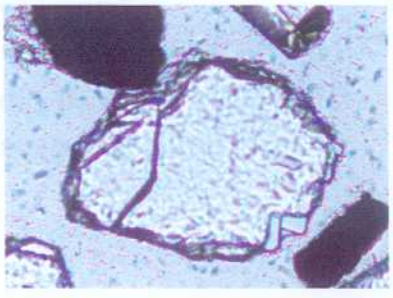


Plate 8

Photomicrographs of representative detrital chromian spinels and garnets from the Mineoka and Setogawa areas. Scale bar is 0.1 mm. Open nicol. The grains of a, c, e, h and k were obtained using heavy liquid separation.

a : detrital garnet from the Takayama Thrust Sheet of the Setogawa Group (sample 02093008)

b : detrital garnet from Oigawa Thrust Sheet of the Setogawa Group (sample 02122605)

c : detrital garnet from the Amakata Sandstone of the Kurami Group (sample 02122803)

d : detrital garnet from the sandstone of the upper part of the Kushigatayama Subgroup of the Koma Group (sample 02102504)

e : detrital garnet from the Momonoki Subgroup of the Koma Group (sample 02102101)

f : detrital clinopyroxene from the conglomerate of the Haccho Formation of the Mineoka Group at Fusada (sample 99122403)

g : detrital clinopyroxene from the Takazuru Formation of the Hota Group (sample 99122407)

h : detrital clinopyroxene from the Okuyama Formation of the Sakuma Group (sample 00080702)

i : detrital clinopyroxene from the Futatsuyama Formation (sample 00040907)

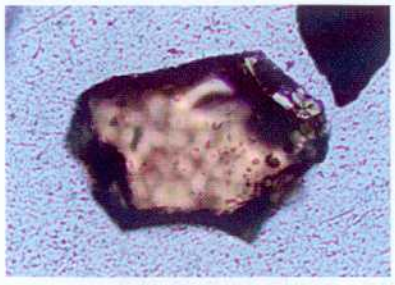
j : detrital clinopyroxene from the serpentine sandstone at Mineokasengen (sample 00081811)

k : detrital clinopyroxene from the sandstone of the upper part of the Kushigatayama Subgroup of the Koma Group (sample 02102502)

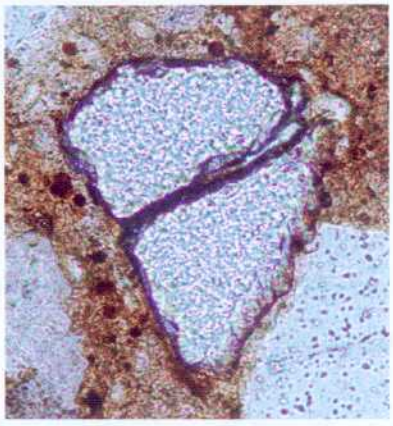
Okuzawa, K.

Plate 8

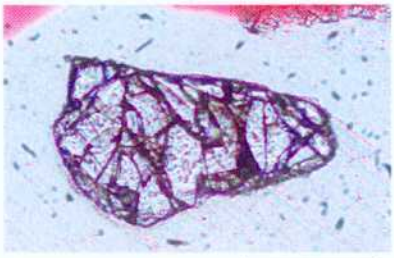
a)



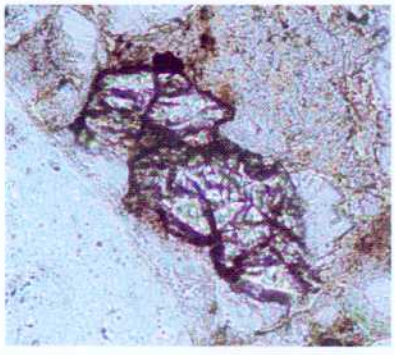
b)



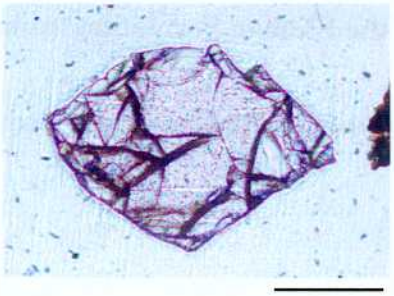
c)



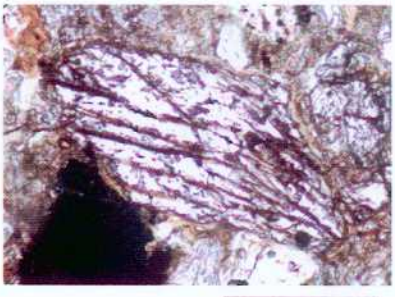
d)



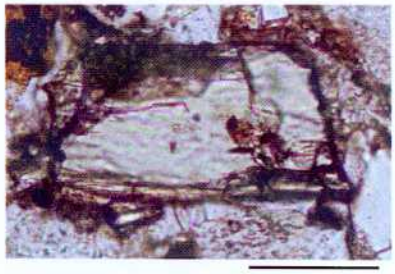
e)



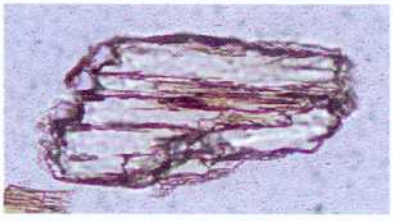
f)



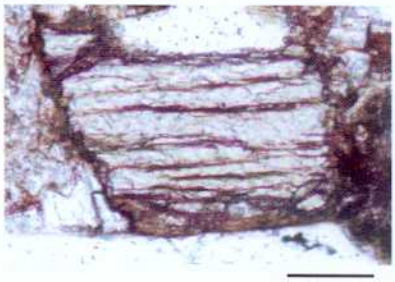
g)



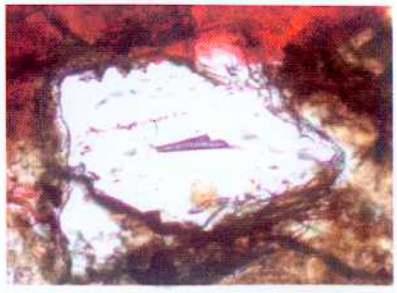
h)



i)



j)



k)

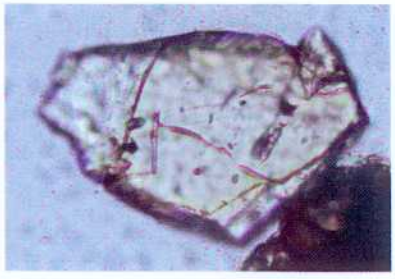


Plate 9

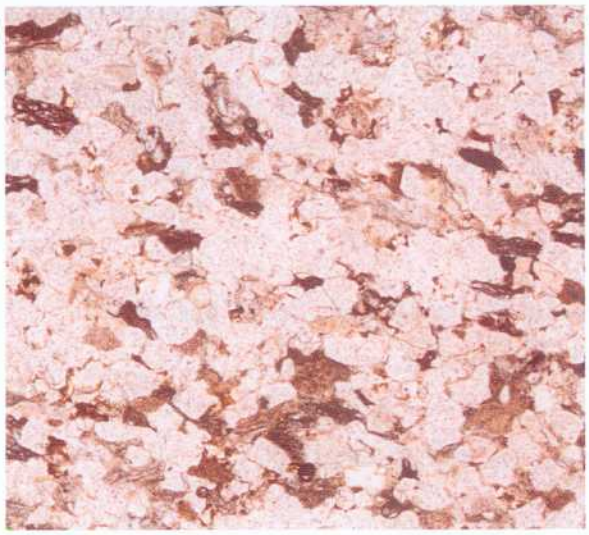
Photomicrographs of sandstones in the Bengal basin. Scale bar is 0.5 mm. a, c and e : open nicol, b, d and f : cross nicol.

a and b : sandstone of the Barail Formation (sample 00042013)

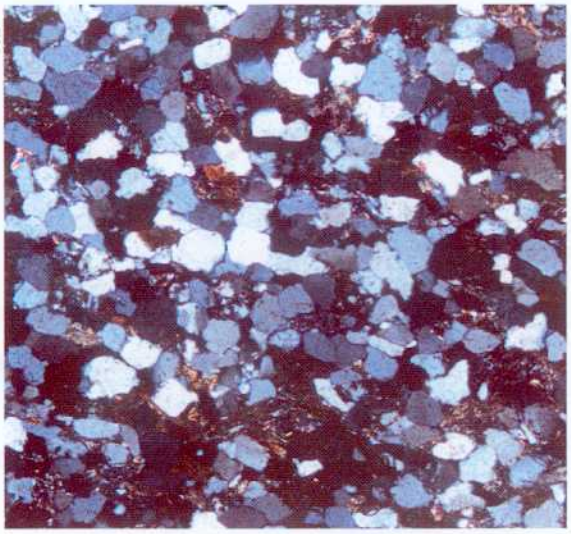
c and d : sandstone of the Bhuban Formation (sample CH01)

e and f : sandstone of the Boka Bil Formation (sample CH05)

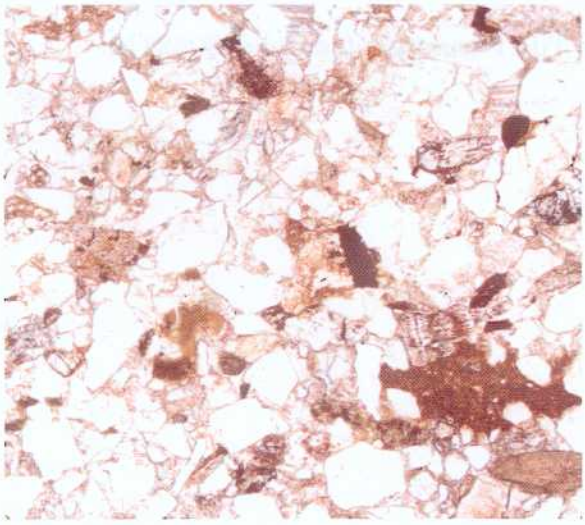
a)



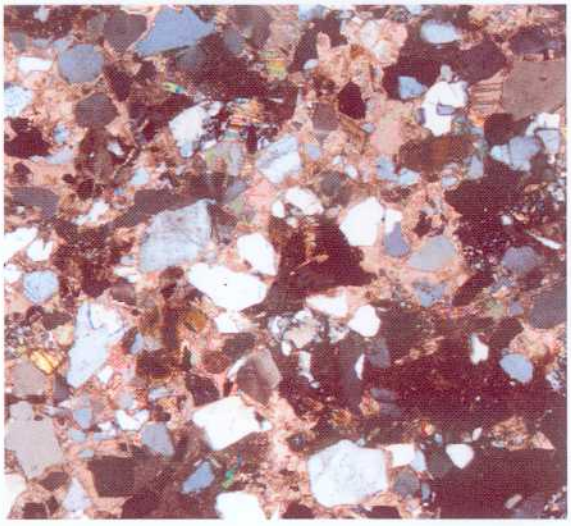
b)



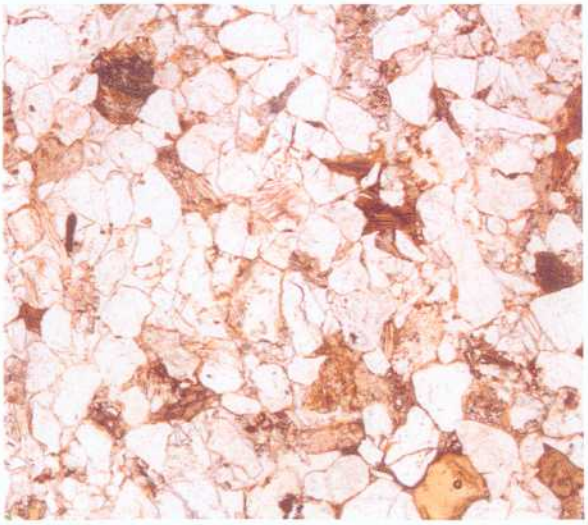
c)



d)



e)



f)

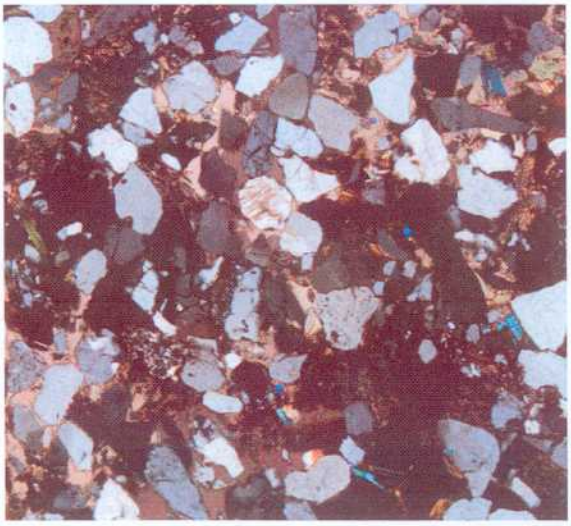


Plate 10

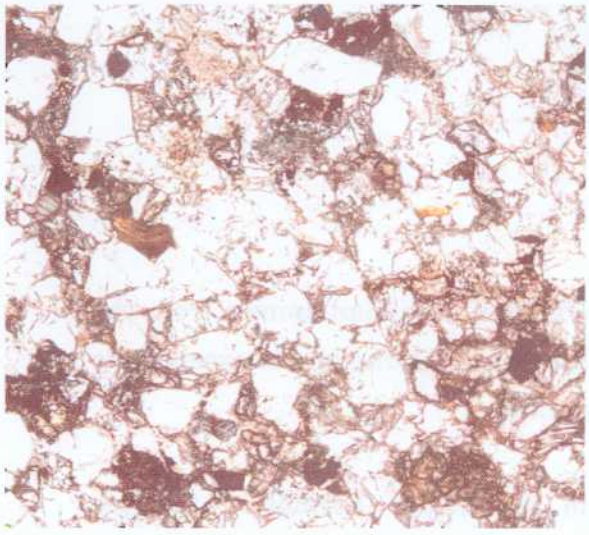
Photomicrographs of sandstones in the Bengal basin. Scale bar is 0.5 mm. a, c and e : open nicol, b, d and f : cross nicol.

a and b : sandstone of the Tipam Group (sample 00042103)

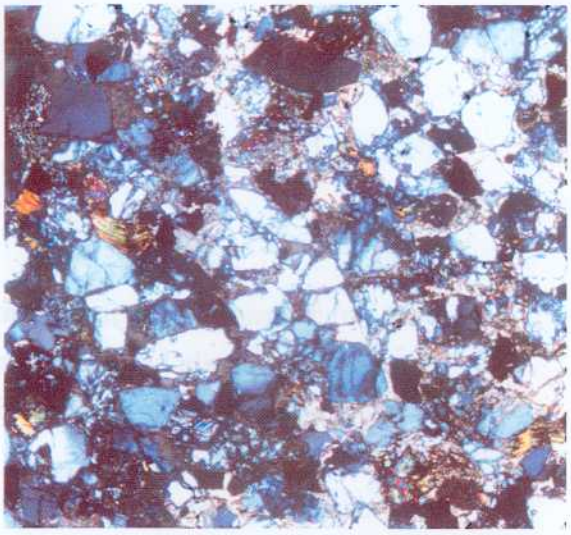
c and d : quartzose sandstone of the Dupi Tila Formation (sample 00042201)

e and f : lithic sandstone of the Dupi Tila Formation (sample 00042110)

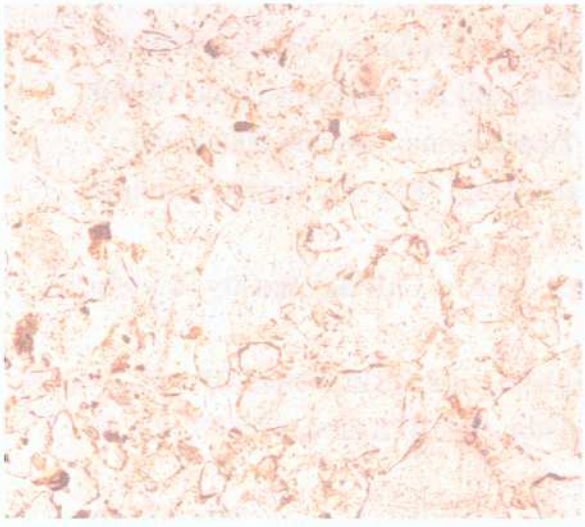
a)



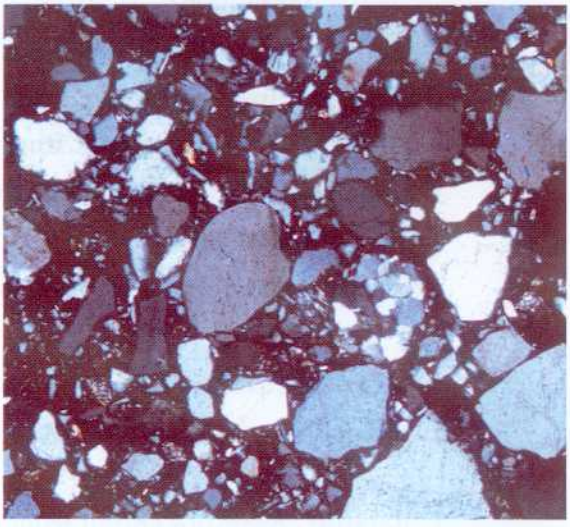
b)



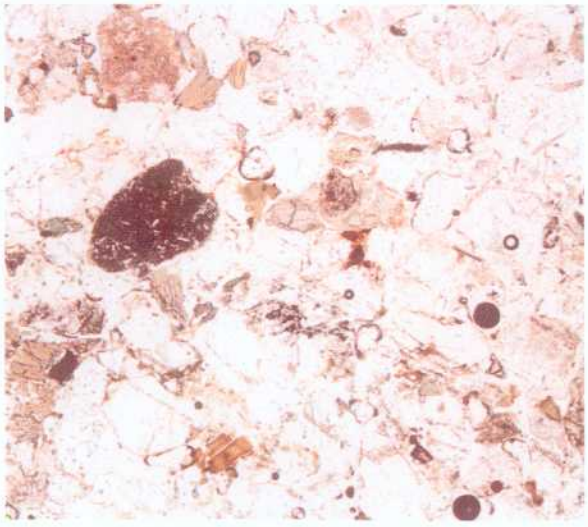
c)



d)



e)



f)

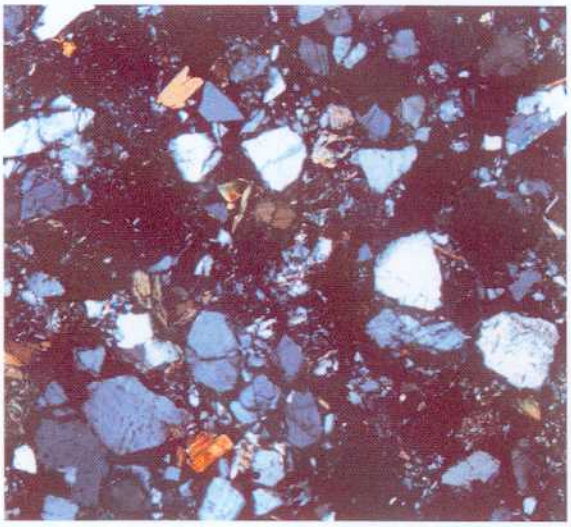


Plate 11

Photomicrographs of representative detrital chromian spinels from the Bengal basin. Scale bar is 0.1 mm. Open nicol. All the grains except for e were obtained using heavy liquid separation.

a : detrital chromian spinel from the Kopili Formation (sample 00042013)

b : detrital chromian spinel from the Barail Formation (sample 00042006)

c : detrital chromian spinel from the Bhuban Formation (sample CH01)

d : detrital chromian spinel from the Boka Bil Formation (sample CH03)

e : detrital chromian spinel from the Tipam Group (sample 00042103)

f : detrital chromian spinel from the Dupi Tila Formation (sample 00042110)

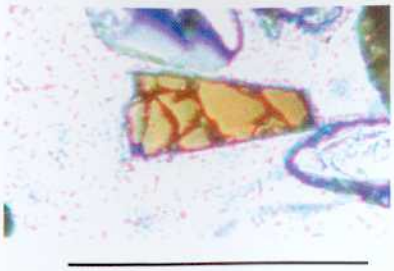
g : detrital chromian spinel from beach sand at Chittagong City (sample CH14)

h : detrital chromian spinel from the piston core BP1 (sample BP1-8)

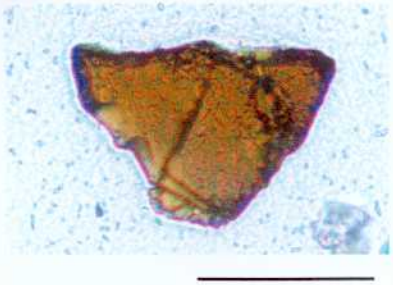
i : detrital chromian spinel from the piston core BP3 (sample BP3, 4-1 ⑩-⑮)

j : detrital chromian spinel from the piston core BP4 (sample BP4, 9-2 ①-⑥)

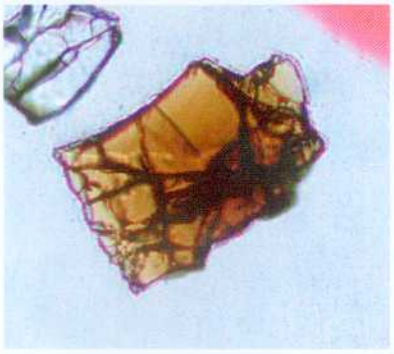
a)



b)

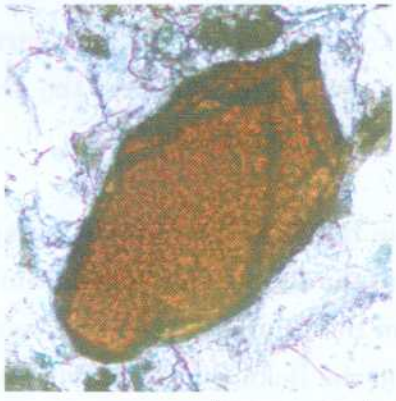


c)

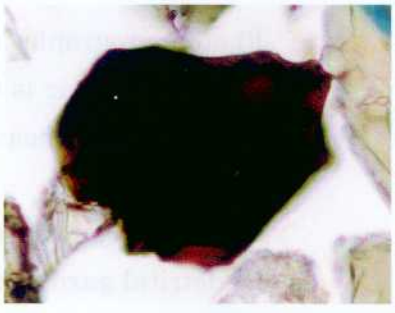


d)

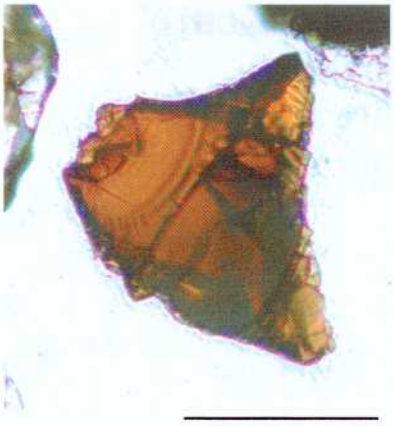
e)



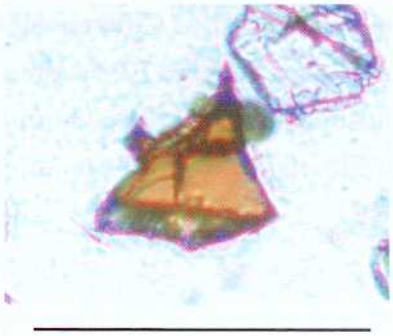
f)



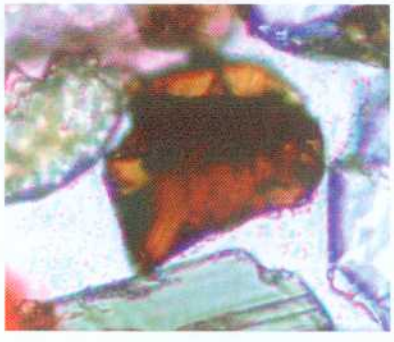
g)



h)



i)



j)

Plate 12

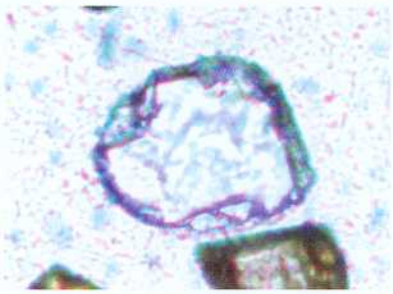
Photomicrographs of representative detrital garnets from the Bengal basin. Scale bar is 0.1 mm. Open nicol. All the grains except for e were obtained using heavy liquid separation.

a : detrital garnet from the Kopili Formation (sample 00042013)
b : detrital garnet from the Barail Formation (sample 00042006)
c : detrital garnet from the Bhuban Formation (sample CH01)
d : detrital garnet from the Boka Bil Formation (sample CH03)
e : detrital garnet from the Tipam Group (sample 00042103)
f : detrital garnet from the Dupi Tila Formation (sample 00042110)
g : detrital garnet from beach sand at Chittagong City (sample CH14)
h : detrital garnet from the piston core BP1 (sample BP1-8)
i : detrital garnet from the piston core BP3 (sample BP3, 4-1 ⑩-⑮)
j : detrital garnet from the piston core BP4 (sample BP4, 9-2 ①-⑥)

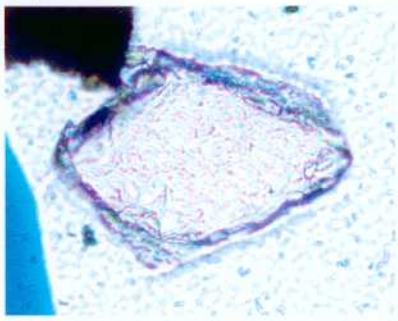
Okuzawa, K.

Plate 12

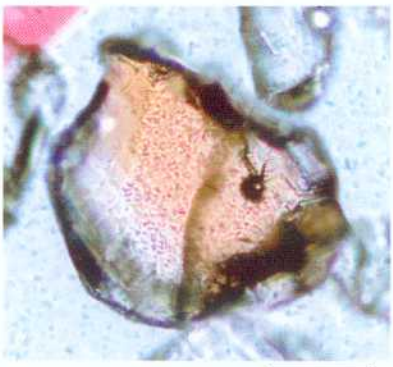
a)



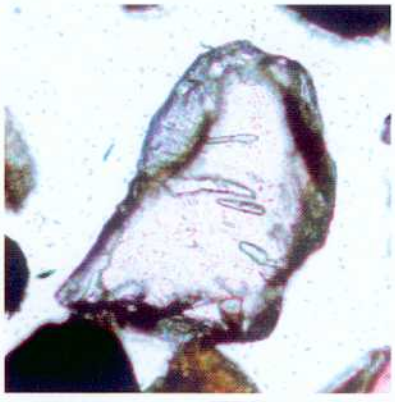
b)



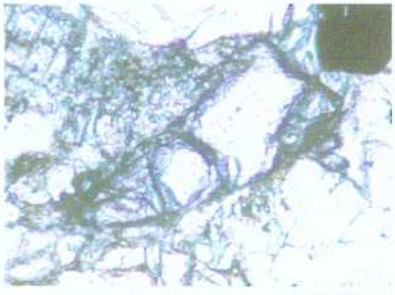
c)



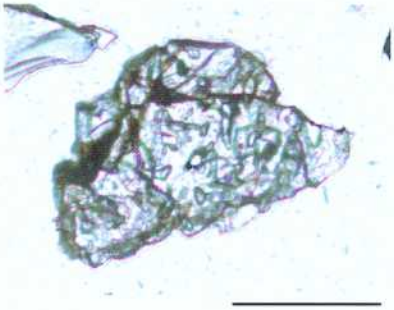
d)



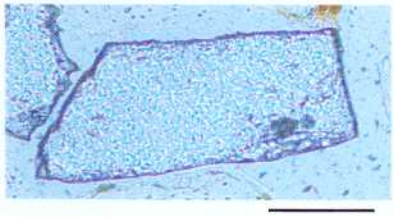
e)



f)

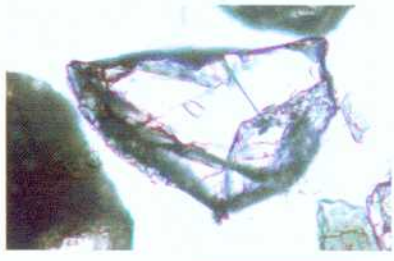


g)



h)

i)



j)