LIST OF PLATES

PLATE NO.1

A. Field photograph showing bedded limestone at Kovandakurichi
B. Field photograph showing marl at Kovandakurichi
C. Field photograph showing bedding rolled lithoclast at Kovandakurichi
D. Field photograph showing huge blocks of granite at Kovandakurichi
E. Field photograph showing granite clast in limestone
F. Field photograph showing calcareous mudstone at Kovandakurichi
G. Field photograph showing calcite vein
H. Field photograph showing granite lithoclast

PLATE NO.2

A. Field photograph showing the contact between Archaean crystalline rocks and the overlying beds at Kovandakurichi
B. Field photograph showing silt stone at Maruvattur
C. Field photograph showing crystalline rocks with shell limestone in the foreground at Maruvattur
D. Field photograph showing massive coral limestone at Kallakudi

E. Field photograph showing weathered gneiss at Tirupattur

F. Field photograph showing limestone containing a vug filled with secondary calcite at Melarasur

G. Field photograph showing pink massive limestone at Tirupattur

H. Field photograph showing thin bedded fragile limestone at Tirupattur

PLATE NO.3

A. Field photograph showing fragile limestone

B. Field photograph showing steeply dipping beds at Tirupattur with stony waste in the background

C. Field photograph showing crumbled multiple fractured granite rocks south west of Maruvattur

D. Field photograph showing silt stone with channels

E. Field photograph showing calc arenite

F. Field photograph showing massive coral limestone

G. Field photograph showing flame structure

H. Field photograph showing massive coral limestone at Melarasur.
PLATE NO.4

A. Field photograph showing contact between pale pink limestone and fragile limestone at Tirupattur

B. Field photograph showing pale pink limestone

C. Field photograph showing granite beds at Olapadi

D. Field photograph showing country rock contact with limestones at Verugupadi

E. Field photograph showing vug at Olapadi

F. Field photograph showing hard compact limestone at Olapadi

G. Field photograph showing kankar beds at Olapadi

H. Field photograph showing bedded limestone at Olapadi

PLATE NO.5

A. Field photograph showing load cast

B. Field photograph showing fragile limestone at Verugupadi

C. Field photograph showing contact between massive coral limestone and fragile limestone

D. Field photograph showing hard ground

E. Field photograph showing vugs in silt stone

F. Field photograph showing pale pink limestone at Neykulam

G. Field photograph showing marl beds at Kovandakurichi
H. Field photograph showing calcareous mudstone at Melarasur with water stagnation in the foreground.

PLATE NO.6

A. Micro photograph showing original circular outline of Ooids with superposition of different cement (100 x)

B. Micro photograph showing broken Ooids in a ferruginous matrix (63 x)

C. Micro photograph showing geopetal Ooids with quartz grains in the background (63 x)

D. Micro photograph showing Pelmicrite (63 x)

E. Micro photograph showing Quartz in a argillaceous matrix (40 x)

F. Micro photograph showing Biomicrite (40 x)

G. Micro photograph showing angular and sub angular quartz grains (40 x)

H. Micro photograph showing Wackestone with quartz (uncrossed, 16 x)

PLATE NO.7

A. Micro photograph showing Calcarenite (40 x)

B. Micro photograph showing Basal conglomerate with angular and sub angular grains (40 x)

C. Micro photograph showing Bryozoan grains with parallel fibers (40 x)
D. Micro photograph showing blue stained ferroan Bryozoan fossil (40 x)

E. Micro photograph showing poorly washed Biomicrite(40 x)

F. Micro photograph showing honey comb structure (40 x)

G. Micro photograph showing fibrous molluscan fragments (16 x)

H. Micro photograph showing Bryozoan colony. (40 x)

PLATE NO.8

A. Micro photograph showing of Foraminiferal limestone with micrite walled foram (40 x)

B. Micro photograph showing fenestrate Bryozoan. Note a thick walls of Bryozoans filled by calcite (40 x)

C. Micro photograph showing Discocyclinids with partially filled chambers (40 x)

D. Micro photograph showing Gastropod like foram at the center. The cement is characteristic of phreatic zone (63 x)

E. Micro photograph showing Wackestone with foraminifera (40 x)

F. Micro photograph showing Mat structure in ferroan fragment (40 x)

G. Micro photograph showing transverse section of Bryozoan (100 x)

H. Micro photograph showing Brachiopod fragment in which outer prismatic layers are preserved (40 x)
PLATE NO.9

A. Micro photograph showing transverse section of algae (63x)
B. Micro photograph showing Litho phylum (120 x)
C. Micro photograph showing pelleted mudstone (4 x)
D. Micro photograph showing packed Biomicrite (16 x)
E. Micro photograph showing Non ferroan calcite fibrous molluscan grain (63 x)
F. Micro photograph showing Oolitic grainstone (16 x)
G. Micro photograph showing Shelter type porosity (uncrossed 16 x)
H. Micro photograph showing Mouldic porosity (16 x)

PLATE NO.10

A. Micro photograph showing Vuggy porosity (40 x)
B. Micro photograph showing Mudstone with micro pores (40x)
C. Micro photograph showing crust coating characteristic feature of late diagenesis (63 x)
D. Micro photograph showing Encrustation of grains (63 x)
E. Micro photograph showing Foraminiferal wackestone (40x)
F. Micro photograph showing a transverse shell fragment with geopetal structure (40 x)
G. Micro photograph showing facture filled with sparite (63x)

H. Micro photograph showing Micrite coating around bioclast (40x)

PLATE NO.11

A. Micro photograph showing evidences of compaction (40x)

B. Micro photograph showing late fracturation in the form of infilled parallel fractures (63x)

C. Micro photograph showing fracture porosity being filled with different generation of cement (40x)

D. Micro photograph showing original skeleton has been altered with calcite (40x)

E. Micro photograph showing Non ferroan calcite grain showing neomorphic changes (63x)

F. Micro photograph showing granite in Kovandakurichi (4x)

G. Micro photograph showing calcispheres associated with bioclast (40x)

H. Micro photograph showing red coral (40x)

PLATE NO.12

A. Micro photograph showing Geopetal Ooid. Original circular outline in the background (40x)

B. Micro photograph showing Bafflestone (40x)
C. Micro photograph showing Rudist skeletal fragment with micro pores (63 x)

D. Micro photograph showing Bryozoan in wackestone (63 x)

E. Micro photograph showing Pelmicrite (40 x)

F. Micro photograph showing bioclast showing mat structure (40 x)

G. Micro photograph showing solution channel (63 x)

H. Micro photograph showing solution porosity in limestone (63 x)