The ultrabasic rocks are dark looking, fine grained and somewhat schistose; they contain biotite and clinopyroxene as major constituents. with amphibole as a subordinate mineral. These rocks occur either as large patches or as bands and lenses in foliated or leucocratic varieties, and they are traversed by fine to medium grained nepheline-alkali-feldspar veins in an irregular fashion. These veins are rarely ptygmatically folded and also form networks in the ultrabasic rocks; they are considered as off-shoots from the enclosing foliated and leucocratic rocks which are inferred to be younger than the ultrabasic rocks.

The basic rocks are coarse grained and occasionally exhibit a crude foliation due to the alignment of the mafic constituents (amphibole and biotite).

The granulitic mesocratic rocks are fine (to medium) grained with an overall dark grey appearance simulating a "charnockitic look"; these rocks, which on weathering exhibit a faint foliation, are of restricted distribution and commonly occur as bands in foliated or leucocratic syenites.

The foliated syenites are coarse to medium grained and are rarely banded. Amphibole and biotite are chiefly responsible for imparting a remarkably distinct gneissosity to these rocks, which can be divided into various types depending on the proportion of mafic to felsic minerals, and on the width of the mafic layers and spacing between them. The foliated syenites constitute the bulk of the Elchuru hills and the general strike of the foliation planes ranges from NE-SW to E-W, with dips towards SE to S.

The leucocratic syenites are extremely coarse grained rocks with considerable variation in the grain size, and a pegmatoidal variety has been recognised. Amphibole and biotite are sub-ordinate minerals; K-feldspar and nepheline form the main constituents in these rocks. The colour of nepheline, in the leucocratic as well as in foliated syenites, varies considerably; the main colours observed are yellowish-brown and green; the mineral is easily identified by its pitted appearance and greasy lustre. In only one specimen belonging to this division, corundum and sodalite are identified. Small amounts of calcite, apatite, zircon and sphene are observed in many specimens.

A considerable number of "dolerite" dykes are noticed in the area under investigation.

Alkalic rocks—"a group so insignificant in volume, so enigmatic in origin and so attractive to one's curiosity"— have attracted the attention of the petrologists all over the world. In India vigorous research work is being carried out in recent years on the already known alkaline complexes of Kishangarh[2,3] (Rajasthan), Koraput[4] (Orissa), Kunavaram[5-7] (Andhra Pradesh) and Sivamalai[8] (Tamil Nadu). The newly discovered Elchuru alkaline complex (lying between Kunavaram in NE and Sivamalai in SW, and close to the eastern margin of the Cuddapah basin) opens the door to new vistas in the elucidation of tectonic and petrological evolution of this part of the pre-Cambrian shield of Peninsular India. Detailed and definitive studies on the Elchuru area and rocks are now in progress.

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ON A TELEOSTEAN OOCYTE WITH TWO GERMINAL VESICLES

While studying the oogenesis in *Tilapia mossambica*, an interesting case of the occurrence of two large germinal vesicles was noticed in an oocyte. In a typical teleostean oocyte in which deutogenesis has not commenced the oocyte normally contains a large spherical germinal vesicle surrounded by clear cytoplasm. The germinal vesicle contains nucleoplasm and a number of deeply staining spherical nucleoli scattered within the nucleoplasm or arranged peripherally. The smooth wall of the germinal vesicle may become uneven owing to the accumulation of deutoplasm in the growing oocyte. Eventually the germinal vesicle loses its compact shape and becomes an irregular

island of nucleoplasm in the centre of the oocyte. Nath, Singh and Baker (1944) observed in certain fresh water teleosts a large number of pocket-like outpushings in the germinal vesicle each containing a nucleolus. Scharff (1887) while describing these peculiar pocket-like structures in the germinal vesicle of the gurnard noted that these pockets with the contained nucleolus may get separated off and carried towards the periphery of the egg. During the present study, in all the oocytes examined, the germinal vesicle was invariably smooth and the pocket-like outpushings observed by previous workers were conspicuously absent. But in one instance in an oocyte measuring 256 microns in diameter a peculiar feature was noticed. This oocyte was unique in the possession of two distinct germinal vesicles instead of one within the cytoplasm. Both the germinal vesicles were almost the same size measuring 90 microns in the long axis and 67 microns in the short axis, each having a condensation of nucleoplasm within it and a number of nucleoli along the inner margin of the nuclear membrane (Fig. 1). Reconstruction of a number of serial sections passing through this oocyte clearly showed that the presence of the two germinal vesicles was not due to artifacts. The two germinal vesicles are quite separate and independent each possessing characteristic features of a typical teleostean germinal vesicle.

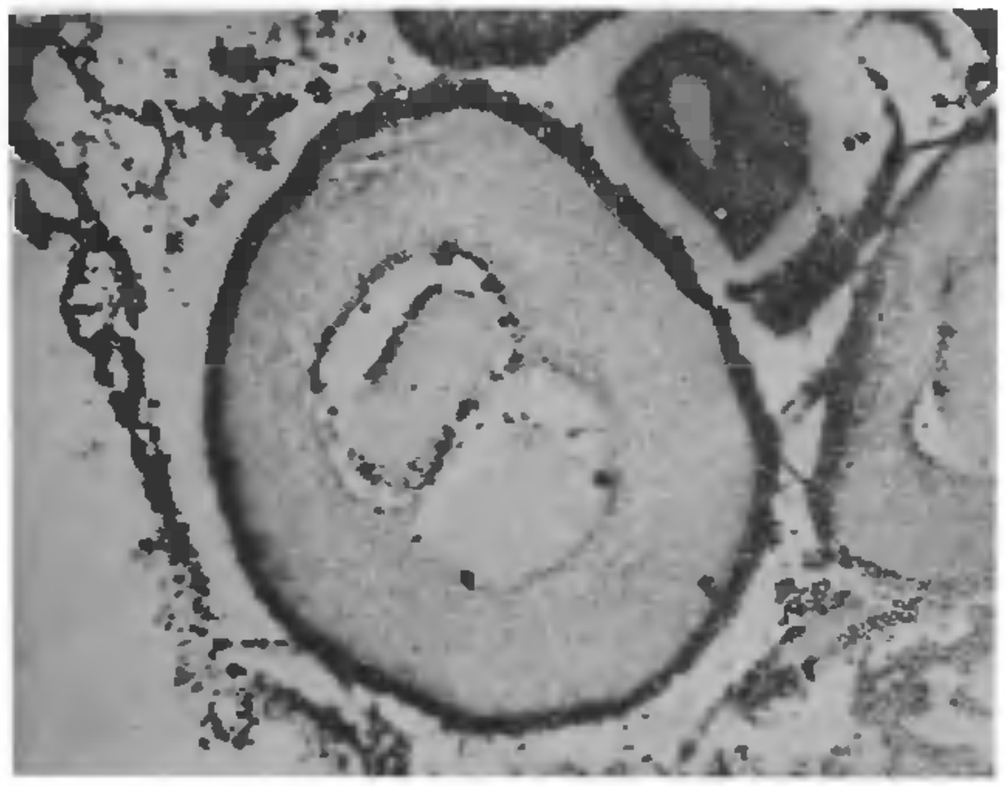

FIG. 1. Photomicrograph of T.S. of oocyte showing two germinal vesicles.

No record has hitherto been made on the occurrence of double germinal vesicles in the oocytes of teleosts. According to Peacock and Gresson (1928) in the Hymenoptera and certain other insects, the so-called 'accessory nuclei' appear in the cytoplasm in the middle of the growth period. However, these neither originate by division of the oocyte nucleus nor undergo mitotic division and disappear before the end of oogenesis. Our observations on fishes like *Barbus ticto*, *Gobius giuris* and *Stigmatogobius javanicus* have not revealed the existence of any oocyte possessing two germinal vesicles. The occurrence of this condition in *Tilapia mossambica* may therefore, be regarded as a very rare instance of an abnormal oocyte.

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COLONY FOUNDATION IN *MICROCEROTERMES BEESONI* SNYDER BY BUDDING (INSECTA : ISOPTERA : TERMITIDAE)

IN reviewing the information on colony foundation in the order Isoptera, Harris (1958) recognised three ways of colony foundation as follows :

(*i*) by pairs of winged adults,
(*ii*) by isolation of a part of an existing colony and development of substitute reproductives, *i.e.*, by "budding",
(*iii*) by sociotomy ("La Socotomie" of Grasse and Noirot), the migration of the original parents to a new site accompanied by a section of the community leaving the residue to develop substitute reproductives.

Colony of foundation by budding is effected by two kinds of substitute reproductives, namely, (*i*) nymphs of alates and (ii) the larvae, whose internal development is accelerated without corresponding external change (neoteiny) (Sen-Sarma and Chatterjee, 1965). Colony foundation by a process of division or budding off from an existing colony is found in the primitive families where the