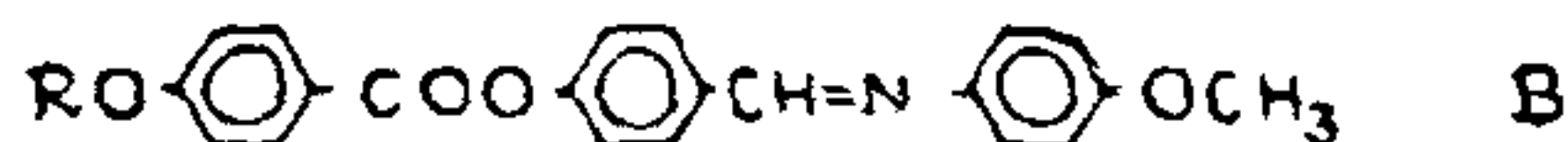
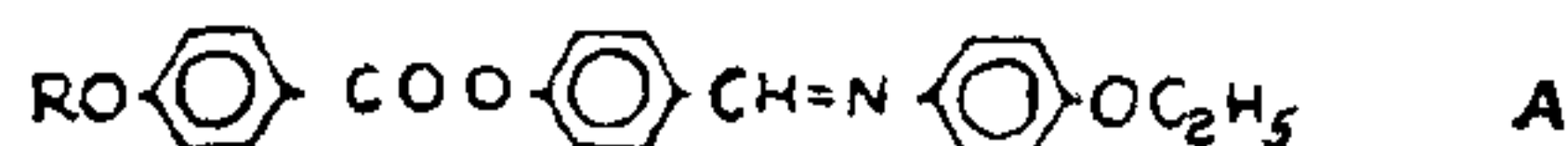


elemental analysis for C, H and N for these compounds agree well with their calculated values.



All the five compounds exhibit enantiotropic smectic and nematic mesomorphism. The smectic phase has focal conic or schlieren texture and the nematic phase has a threaded texture. The octadecyl derivative shows homeotropic texture in the smectic phase, both while heating as well as on cooling.

The compounds studied here (A) are thermally more stable than those of the corresponding compounds of the series (B) *p* (*p'*-*n*-alkoxybenzoyloxy) benzylidene-*p'*-anisidines studied by Dave and Kurian<sup>4</sup>. This is not surprising as the even members in the alkoxy chain in a homologous series occupy the upper curve. Further, the thermal efficiency order for the end groups observed by Dave *et al.* in their study of mixed liquid crystals in the nematic mesophase is as  $\text{OC}_2\text{H}_5 > \text{OCH}_3$ <sup>5</sup>. It is also observed that in the present case (A) the commencement of the smectic phase is enhanced by one member compared to the corresponding compounds of series (B). Such a behaviour is observed by Dave and Patel<sup>1</sup>, in their study of *p*-*n*-alkoxybenzylidene-*p'*-*n*-alkoxyanilines series.

Further work with different substituted anilines is in progress.

The authors express their sincere thanks to Prof. K. N. Trivedi for his keen interest in the work. One of us (N. R. P.) is thankful to the CSIR for the award of the Research Fellowship.

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### LIVING BENTHONIC FORAMINIFERA FROM THE INNERSHELF SEDIMENTS AT VISAKHAPATNAM

THERE have been a few studies on the living foraminifera from the estuaries of the east coast of India<sup>1-3</sup>. There are reports of foraminiferal thanatocoenoses from the beach and shelf sediments off the east coast of India<sup>4-7</sup>. There is virtually no information on the living foraminifera from the eastern shelf of the Indian subcontinent. It is the purpose of this note to report on the foraminiferal biocoenoses from the innershelf sediments off Visakhapatnam, east coast of India.

Sediment samples were collected in February, 1974 in the vicinity of Visakhapatnam from depths of water ranging from 10-90 metres. The samples were preserved in neutralized formalin. They were subsequently wet sieved through a screen having openings of 0.063 mm. The residues were stained with rose Bengal and dried. The foraminifera were concentrated from the residues by the carbon tetrachloride method of separation.

A total of 133 foraminiferal species were identified, which are grouped under 26 families. Of these, the following 38 species were recognized in living condition at the time of sample collection :

*Ammonia annectens* (Parker and Jones), \**A. beccarii* (Linné), \**A. dentatus* (Parker and Jones), \**Asterorotalia trispinosa* (Thalman), \*\**Bolivina compacta* Sidebottom, *B. lobatum* Brady, \**B. spathulata* (Williamson) \*\**B. striatula* Cushman, \*\**B. vadescens* Cushman, *Bulimina marginata* d'Orbigny, \*\**Cancris sagra* d'Orbigny, \*\**Cibicides lobatulus* (Walker and Jacob), *Cyclogyra* (*Cornuspira*) *planorbis* (Schultz), *Elphidium advenum* Cushman, *E. crispum* (Linné), *Fissurina laevigata* Reuss, *F. orbignyana* Sequenza, *Flintina bradyana* Cushman, \*\**Florilus labradoricus* Dawson, \**Gyroldina soldani* d'Orbigny, \**Hanzawaia concentrica* (Cushman), *Lugena laevis* (Montagu), *L. striata* (d'Orbigny), *L. sulcata* (d'Orbigny), *Neoconorbina patelliformis* (Brady), *Nodosaria catsbyi* d'Orbigny, \*\**Nonion grateloupi* (d'Orbigny), \**Nonionella turgida* (Williamson), *Pararotalia nipponica* (Asano), \**Pseudoepionides japonicus* Uchio, *Quinqueloculina lamarckiana* d'Orbigny, \**Q. seminulum* (Linné), *Spiroloculina clara* Cushman, *Textularia agglutinans* d'Orbigny, *T. conica* d'Orbigny, *Triloculina trigonuta* (Lamarck), *T. tricarinata* d'Orbigny, *Trochammina* sp.

The 9 living species marked with an asterisk are abundant in one sample or another. The 7 species marked with a double asterisk are not only abundant but widespread in the area. In the entire area of study the dead populations far exceed the living.