

PUBLICATIONS
ABSTRACT OF PAPERS

1 : Azo Derivatives of 1-anthrol.

Indian J. Appl. Chem., 35(4-6), 111 (1972).

Eight new azo derivatives of 1-anthrol have been prepared by diazotizing substituted anilines and coupling with alcoholic 1-anthrol. These derivatives are characterized by melting point and elemental analysis.

2: Hydroxy Anthracene Derivatives in Azoic Dyeing of Cotton:

The Indian Textile Journal, 89(1), 121 (1978).

The seven hydroxyanthracene derivatives (i) 1-hydroxyanthracene, (ii) 2-hydroxyanthracene, (iii) 4-acetyl-1-hydroxyanthracene, (iv) 1-acetyl-2-hydroxyanthracene, (v) 1-hydroxyanthracene-2-carboxylic acid, (vi) 1,5-dihydroxyanthracene and 1,8-dihydroxyanthracene have been studied as azoic coupling component for azoic dyeing of cotton. The effect of different substituents present in anthracene on the shade of fibre has been studied by absorption spectra of dyed fibres. The effects of different groups on washing, light and rubbing fastness is also discussed.

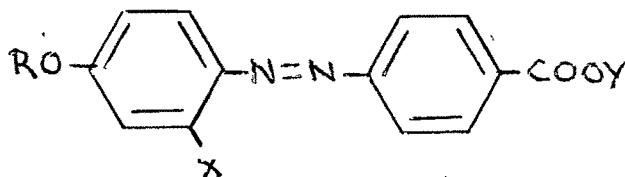
3: Azomesogens :

Paper presented at 7th International Liquid Crystal conference, Bordeaux, France (1978).

(I) 4-(4'-n-Alkoxy-2'-Methylphenylazo)-Benzoic acids,

(II) Ethyl 4-(4'-n-Alkoxyphenylazo) Benzoates.

Two mesogenic homologous series containing azo group are synthesized.



I: $X = CH_3$, $Y = H$.

II: $X = H$, $Y = C_2H_5$

Series (II) is smectogenic in nature. Smectic mesophase commences from the middle members of the series. Series (I) is nematogenic in nature. All the members of the series (I) exhibit nematic mesophases of high thermal stabilities even though a lateral substituent is present ortho to the azo group.

The plot of mesomorphic-isotropic transition temperatures versus number of carbon atoms in the alkyl chain is drawn and the behaviour of mesomorphic-isotropic temperature curves are discussed.