Folded proteins of α-type

α - keratin
α - myosin - from muscle protein
α - muscle - muscle itself

2 kind of muscle, smooth & striated, give same picture

Super-contracted keratins

(hair when side-chains broken)

muscle contracts without steaming

∴ side-chain linkages prob. not involved

Nucleo-proteins

- connected with all nuclei

chromosomes
viruses
tobacco mosaic virus
- liquid crystals in solution
- crystallises like globulin crystals

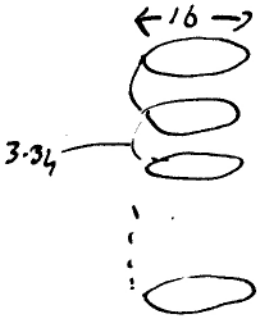
dead in a bottle & alive in tobacco plant

nucleic acid - contained in chromosomes

Na thymonucleate
principal spacing 3.34 along chain
side spacing 16 A.U

molecule length 300X breadth (from D.R of flow)
M. Wt 800,000 ∴ size = 16 X 16 X 6000 AU

molecule of nucleic acid about as long as chromosome
- length approx λ light
- can just see molecule



genes packed in particular positions along chromosomes
- genetical basis for inheritance?

react readily with proteins

RUBBER

Polymer of isoprene C_5H_8

suggested formula

$$\text{:C(CH}_3\text{)-CH}_2\text{-CH}_2\text{-CH:C(CH}_3\text{)-CH}_2\text{-}$$

polymer of isoprene

$$\text{CH}_2\text{:C(CH}_3\text{)-CH:CH}_2$$

ordinary photograph diffuse, no spots
but stretched almost to breaking, using
nearly dry rubber sol^n
- well-defined spots - much better than wood

Rhombic $a = 12.3$ $b = 9.3$ $c = 8.1$

8 molecules C_5H_8 per cell

$P_{2_1 2_1 2_1}$