


## R/S - nomenclature

R  $\Rightarrow$  Rectus (Rightward) 


S  $\Rightarrow$  Sinister (Leftward) 


This nomenclature is only applicable for chiral centre i.e. 4 different groups or atoms must be present around a C-atom.

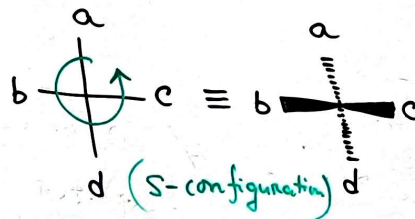
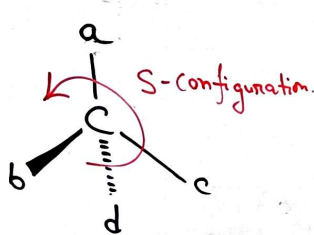
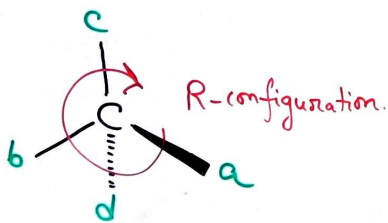
Rules :- i) Sequence rule :- To arrange the 4 different groups/atoms around a chiral C according to their priority value like  $a > b > c > d$ .

ii) Chirality Rule :- Keeping the least priority group (d) away from

the observer, now -

$a \rightarrow b \rightarrow c \Rightarrow$  Clockwise rotation ()  $\Rightarrow$  R-configuration.

$a \rightarrow b \rightarrow c \Rightarrow$  Anticlockwise rotation ()  $\Rightarrow$  S-configuration.



C. I. P rule (The very good nomenclature)

According  
the name  
of 3 scientists

C = Cahn  
I = Ingold  
P = Prelog

i Highest atomic number gets preference over lower one.

If the atomic no. of the 1st connecting atoms are same then consider the next one and so on till a decision is made

ii Higher atomic mass gets preference over lower one when atomic no. fails to determine the priority.

iii Cis precedes trans & Z precedes E.