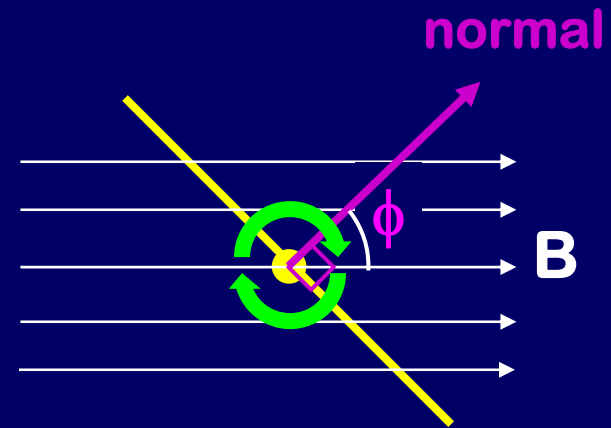
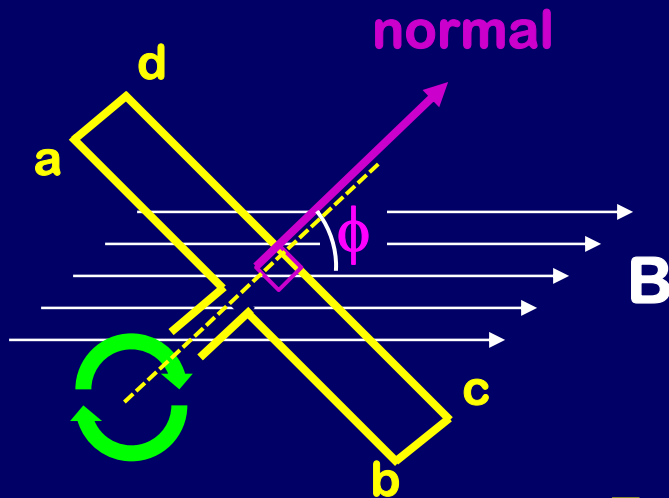


Generators and EMF

A loop of wire is rotated (ex: by a steam engine turbine) in a uniform B field



$$\Phi = B A \cos(\phi)$$

Loop normal rotates relative to B field

$\Rightarrow \phi$ changes $\Rightarrow \Phi$ changes \Rightarrow emf in loop

\Rightarrow voltage generated!