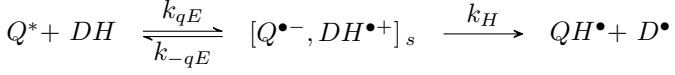


Activation:

$$Q \xrightleftharpoons[k_{-l}]{h\nu, k_l} Q^*$$

$$k_l = 1\text{e}8 - 1\text{e}10$$

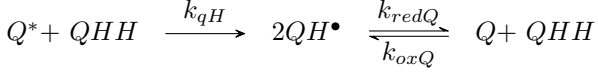
$$k_{-l} = 1\text{e}5 - 1\text{e}6$$

Quenching - Q^* :

$$k_{qE} = 1\text{e}8 - 1\text{e}10$$

$$k_{-qE} = 1\text{e}7 - 1\text{e}9$$

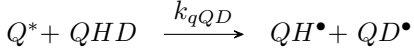
$$k_H = 1\text{e}8 - 1\text{e}10$$



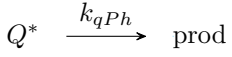
$$k_{qH} = 1\text{e}5 - 1\text{e}9$$

$$k_{oxQ} = 1$$

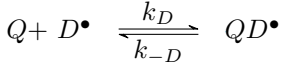
$$k_{redQ} = 1\text{e}9$$



$$k_{qQD} = ? \text{ (2)}$$



$$k_{qPh} = 1\text{e}9 \text{ (1e-5)}$$

Quenching - Q :

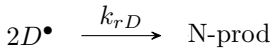
$$k_D = ?(1)$$

$$k_{-D} = (0.05)$$

Other:

$$k_r = ?(1\text{e}9)$$

$$k_p = 1\text{e-}5 - 1\text{e-}3$$



$$k_{rD} = ? \text{ (1e9)}$$