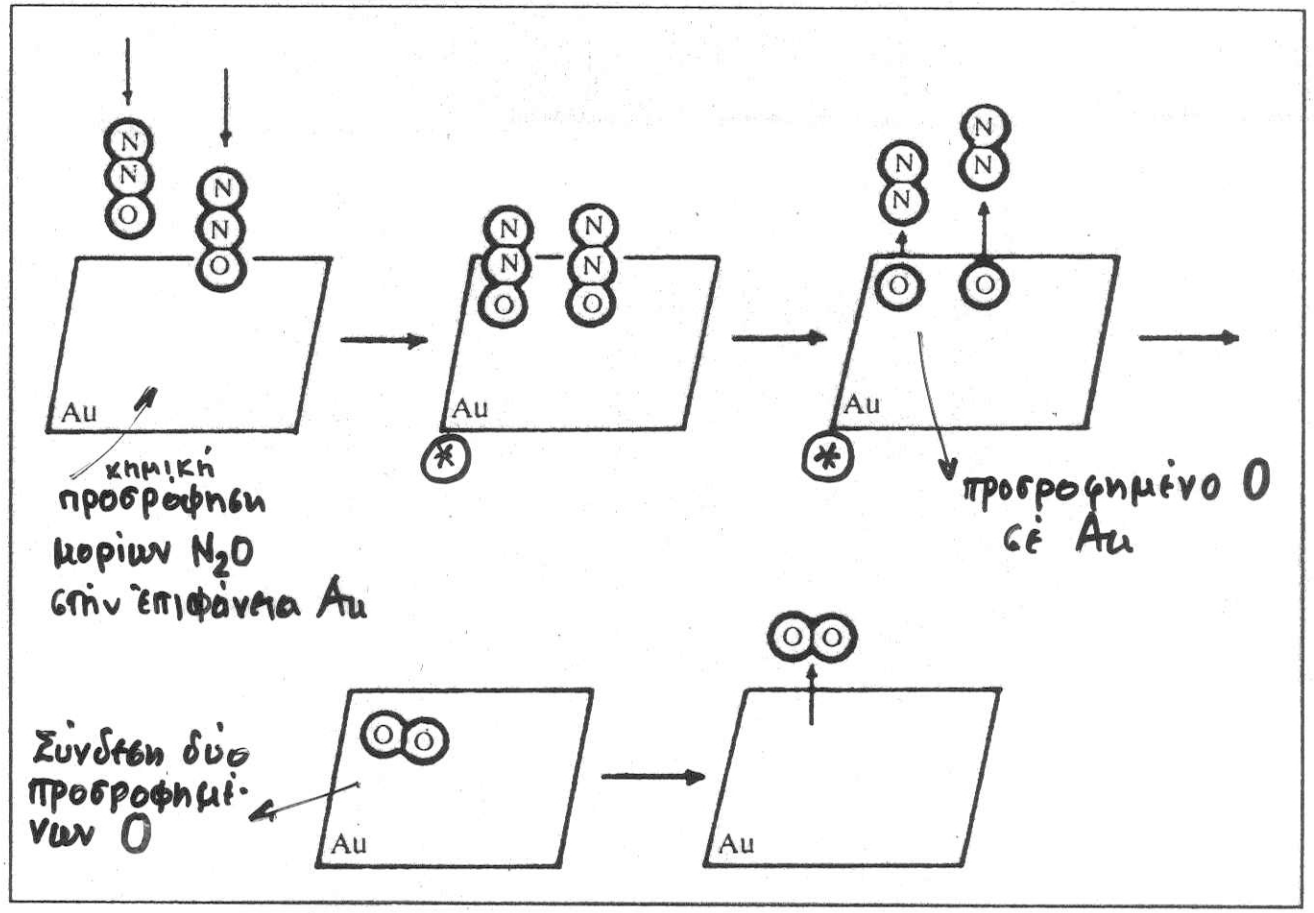
$$2N_2O_{(g)} \xrightarrow{Au} 2N_{2(g)} + O_{2(g)}$$



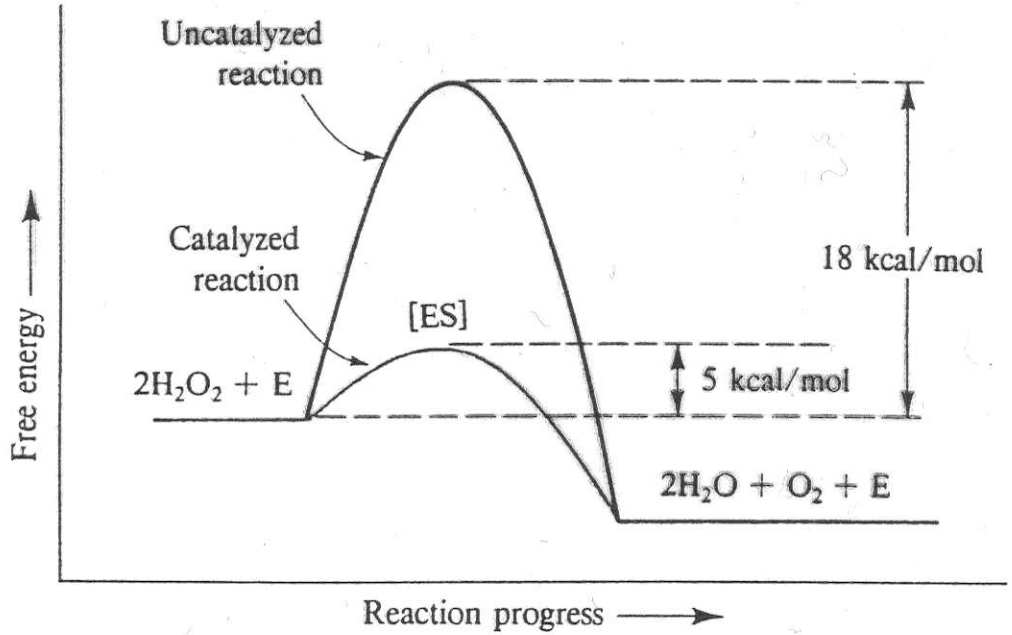
Προτεινόμενος τρόπος διάσπασης του N_2O πάνω σε Au.

$$\upsilon = K[N_2O]$$

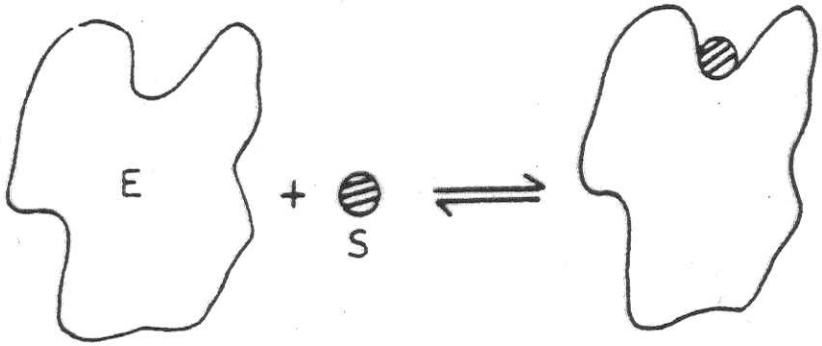
Σε υγηλές πιέσεις $\Rightarrow$ $\upsilon = K$ (μηδενικής τάξεως)

$$2H_2O_2 \xrightarrow{\text{peroxidase}} 2H_2O + O_2$$

hydrogen peroxide



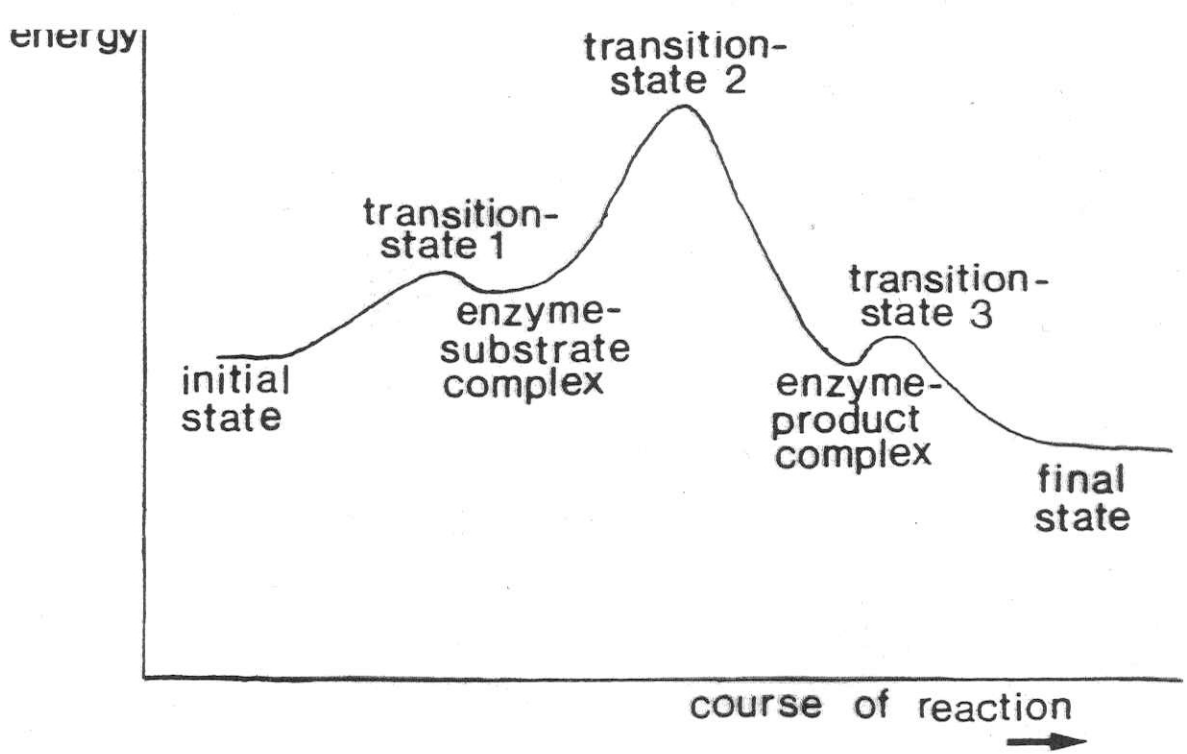
Energy changes for the uncatalyzed and peroxidase-catalyzed decomposition of hydrogen peroxide.



ES
ΣΥΜΠΛΟΚΟ
ΕΝΖΥΜΟΥ-ΥΠΟΣΤΡΩΜΑΤΟΣ

ΠΡΟΪΟΝ + Ε ⇌ Ε-ΠΡΟΪΟΝ

– Σχηματικό διάγραμμα μιας ενζυμικής αντιδράσεως.



— The free energy profile of an enzyme-catalysed reaction involving the formation of an enzyme–substrate and an enzyme–product complex.

For such a reaction investigated at absolute temperatures T_1 and T_2, at the same initial enzyme concentration,

$$\text{Activation energy} = 2.303\,R\left(\frac{T_1T_2}{T_1 - T_2}\right)\log_{10}\left(\frac{k_2 \text{ at } T_1}{k_2 \text{ at } T_2}\right)$$

$$= 2.303\,R\left(\frac{T_1T_2}{T_1 - T_2}\right)\log_{10}\left(\frac{V_{max} \text{ at } T_1}{V_{max} \text{ at } T_2}\right)$$

Ενισχυτής

$$2N_{2(g)} + 3H_{2(g)} \xrightarrow{Fe} 2NH_{3(g)}$$

[K_2O, Al_2O_3]

Παρεμποδιστής ή αντικαταλύτης

$$H_2O_{2(g)} \xrightarrow{Au, Ag, Cu} H_2O_{(l)} + \tfrac{1}{2}O_{2(g)}$$

[H_3PO_3, σκόνη]

Δηλητήρια καταλυτών

$$2SO_{2(g)} + O_{2(g)} \xrightarrow{Pt} 2SO_{3(g)}$$

[As]