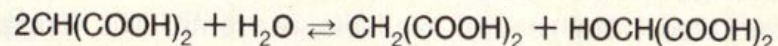
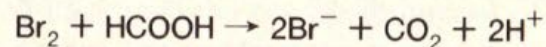
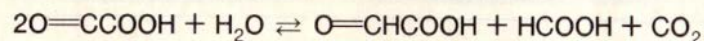
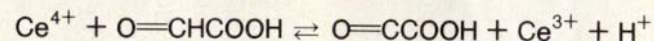
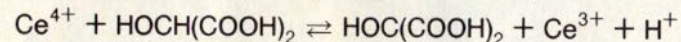
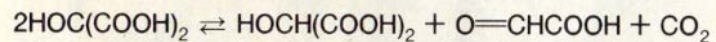
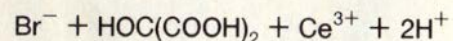
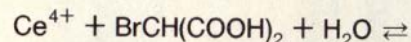
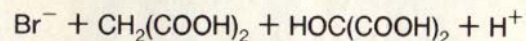
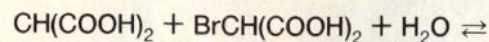
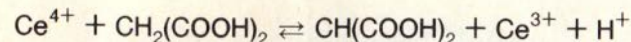
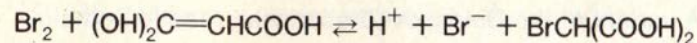
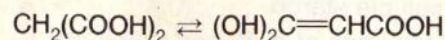
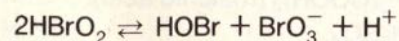
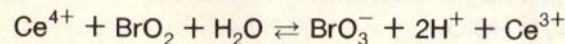
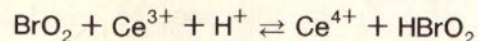
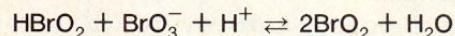
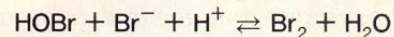
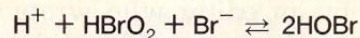
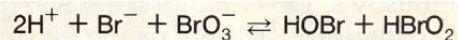


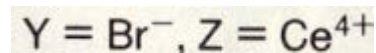
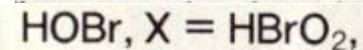
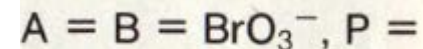
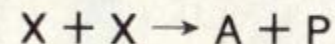
ΑΝΤΙΔΡΑΣΗ ΒΕΛΟΥΣΟΒ-ΖΗΑΒΟΤΙΝΣΚΙΙ



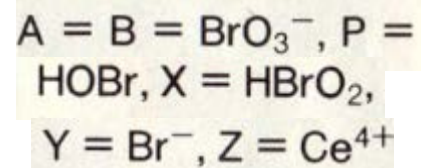
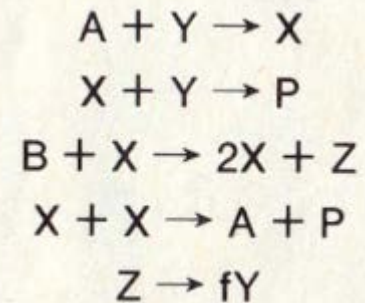
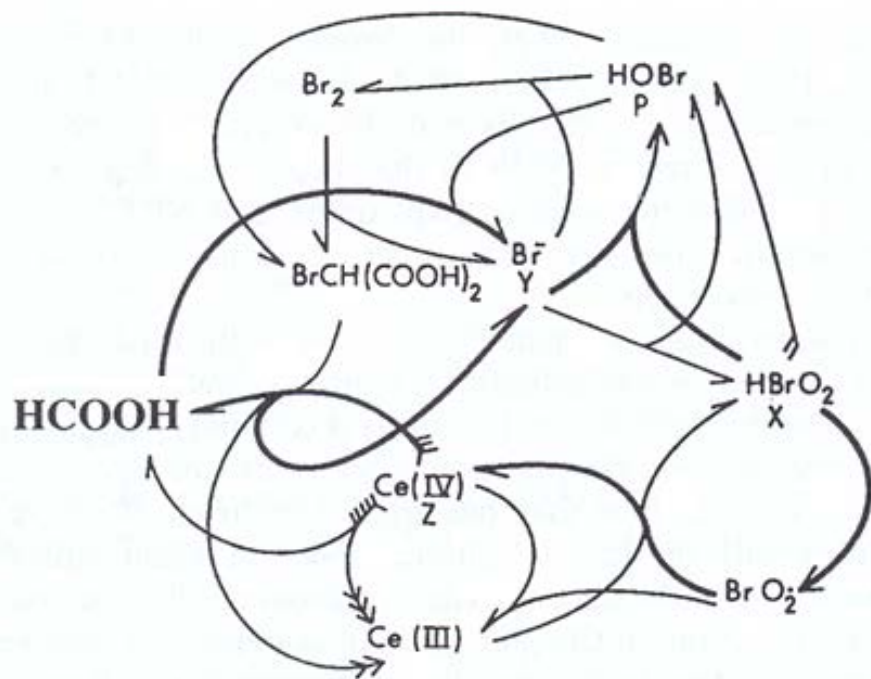
Βασικά Χημικά Στάδια



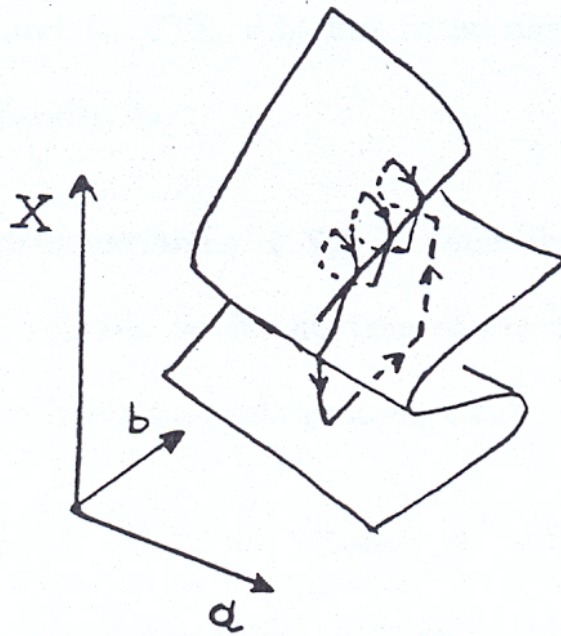
Πρότυπο Μηχανισμού Oregonator



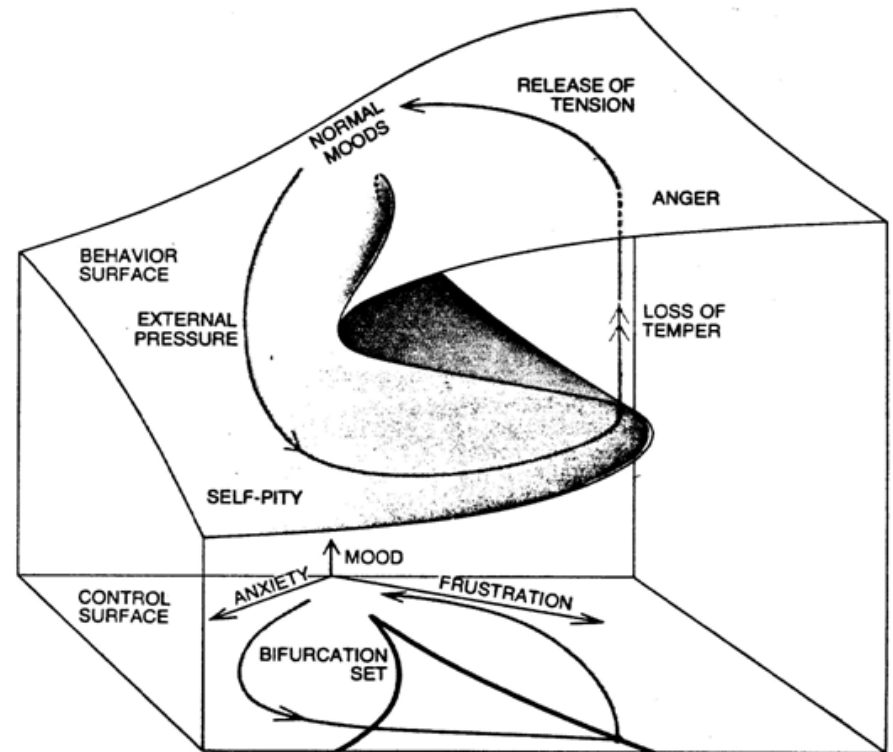
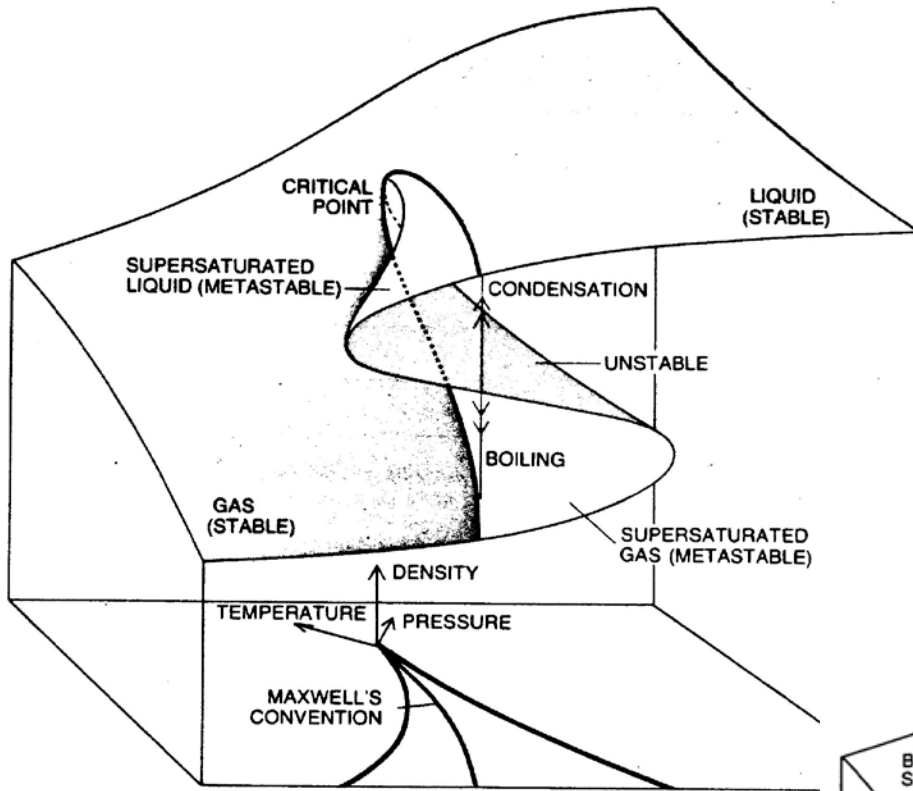
Αναπαράσταση Μηχανισμού Χημικών Αντιδράσεων Ενδιαμέσων μέσω Δικτύου Κινητικών Σταδίων



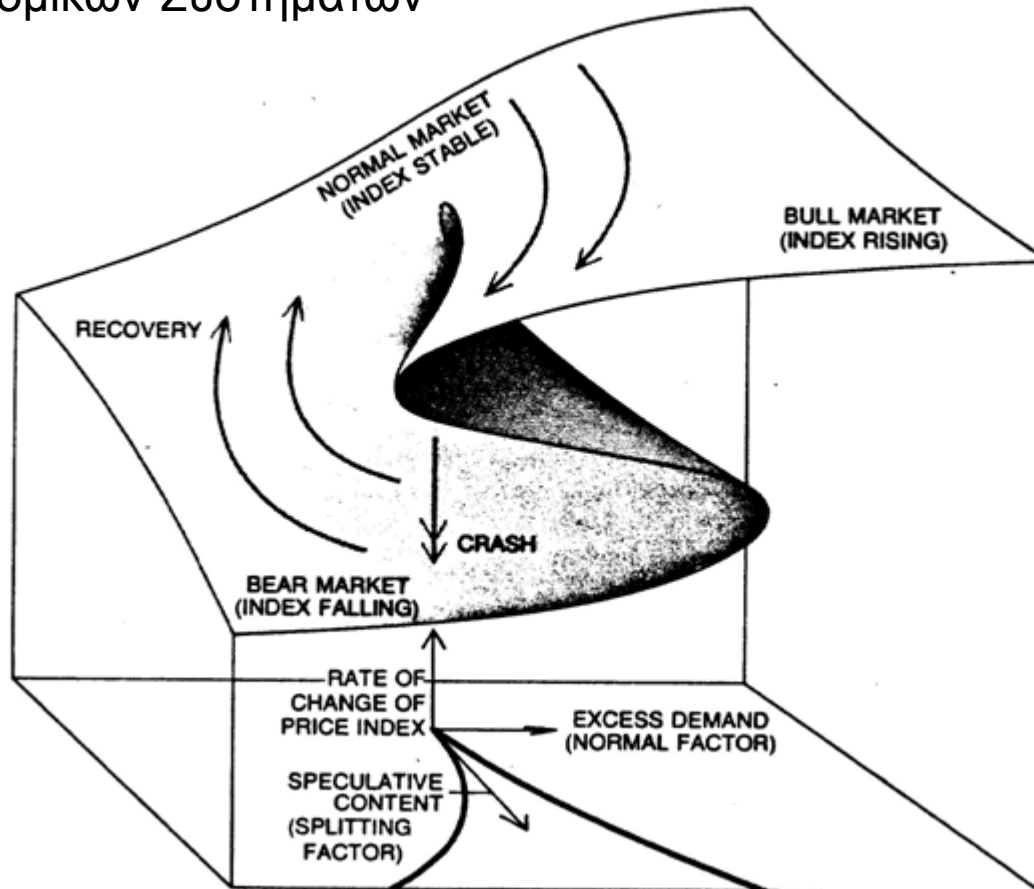
ΧΑΛΑΡΩΤΙΚΕΣ ΤΑΛΑΝΤΩΣΕΙΣ



Επιφάνειες Καταστάσεων Ισορροπίας και Στασίμων Καταστάσεων Δυναμικών Συστημάτων



Μεταπτώσεις Καταστάσεων Οικονομικών Συστημάτων

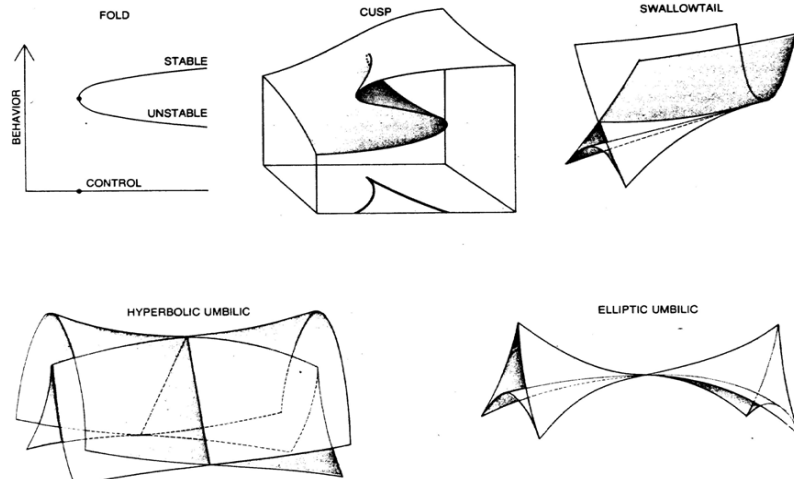


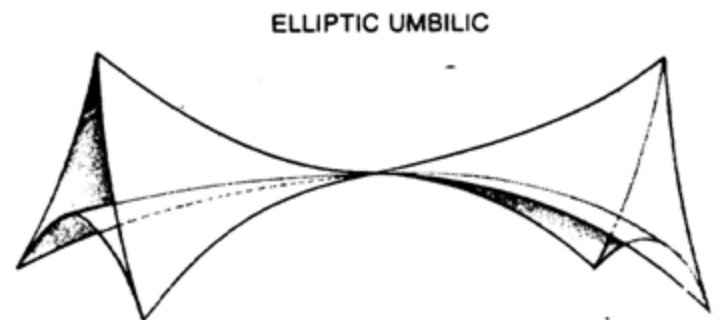
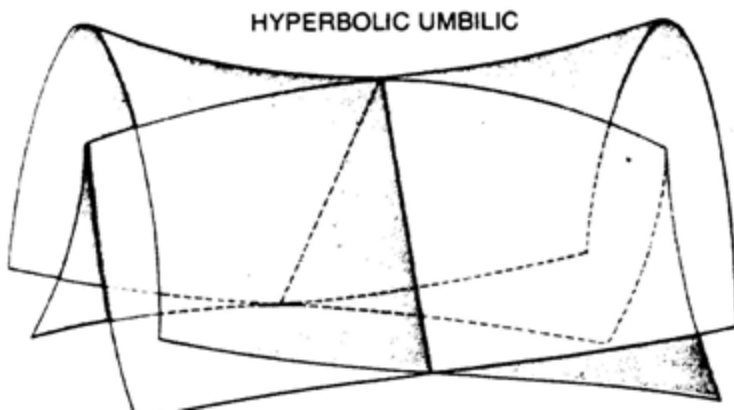
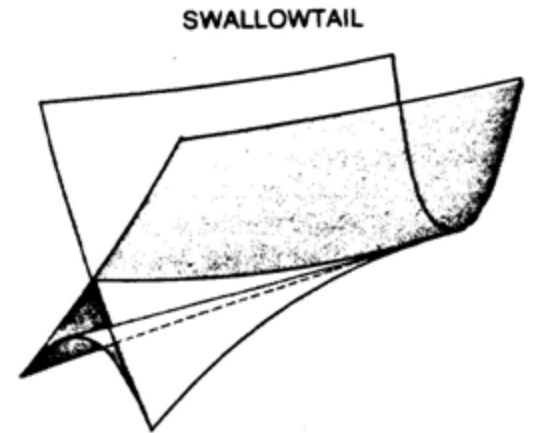
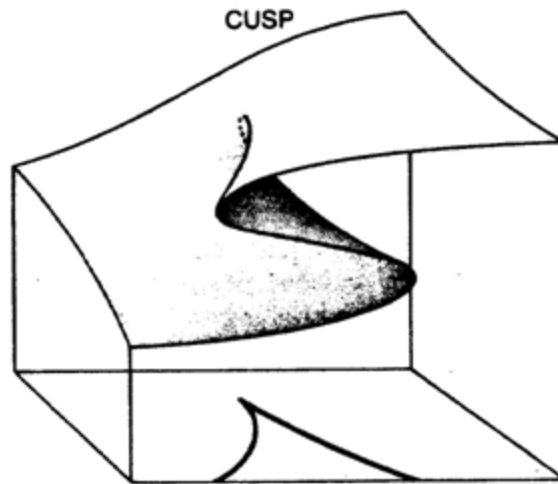
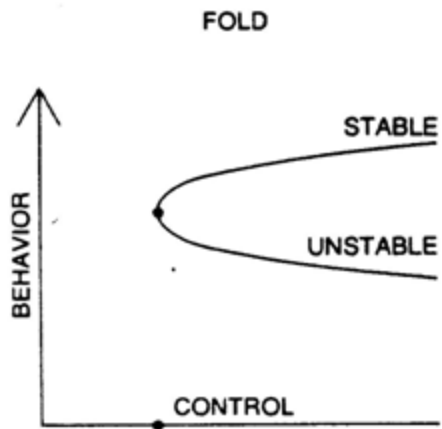
CATASTROPHE		CONTROL DIMENSIONS	BEHAVIOR DIMENSIONS	FUNCTION	FIRST DERIVATIVE
CUSPOIDS	FOLD	1	1	$\frac{1}{3}x^3 - ax$	$x^2 - a$
	CUSP	2	1	$\frac{1}{4}x^4 - ax - \frac{1}{2}bx^2$	$x^3 - a - bx$
	SWALLOWTAIL	3	1	$\frac{1}{5}x^5 - ax - \frac{1}{2}bx^2 - \frac{1}{3}cx^3$	$x^4 - a - bx - cx^2$
	BUTTERFLY	4	1	$\frac{1}{6}x^6 - ax - \frac{1}{2}bx^2 - \frac{1}{3}cx^3 - \frac{1}{4}dx^4$	$x^5 - a - bx - cx^2 - dx^3$
UMBILICS	HYPERBOLIC	3	2	$x^3 + y^3 + ax + by + cxy$	$3x^2 + a + cy$ $3y^2 + b + cx$
	ELLIPTIC	3	2	$x^3 - xy^2 + ax + by + cx^2 + cy^2$	$3x^2 - y^2 + a + 2cx$ $-2xy + b + 2cy$
	PARABOLIC	4	2	$x^2y + y^4 + ax + by + cx^2 + dy^2$	$2xy + a + 2cx$ $x^2 + 4y^3 + b + 2dy$

SEVEN ELEMENTARY CATASTROPHES describe all possible discontinuities in phenomena controlled by no more than four factors. Each of the catastrophes is associated with a potential function in which the control parameters are represented as coefficients (a , b ,

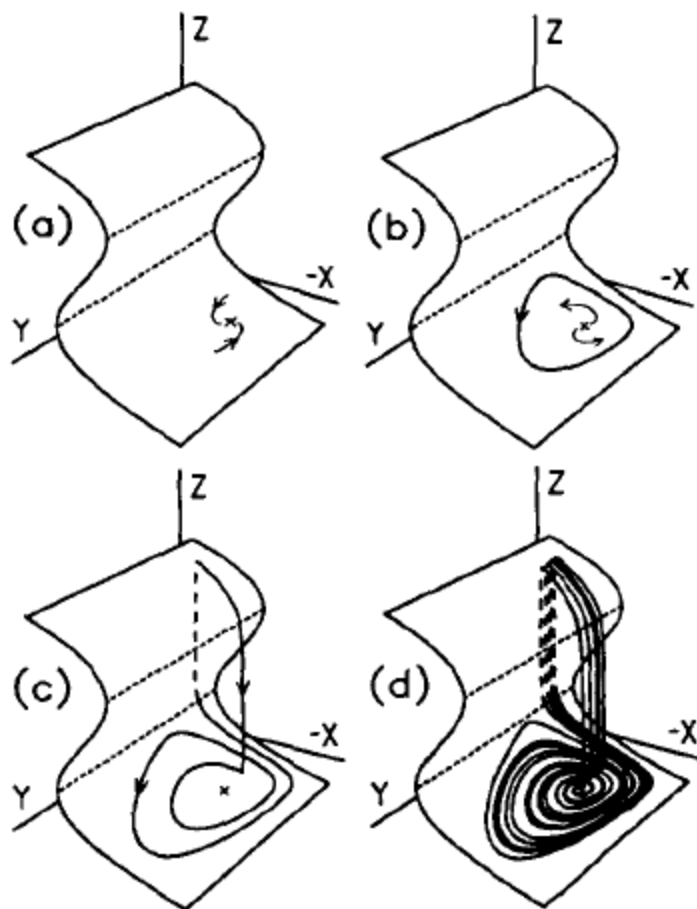
c , d) and the behavior of the system is determined by the variables (x , y). The behavior surface in each catastrophe model is the graph of all the points where the first derivative of this function is equal to zero or, when there are two first derivatives, where both are equal to zero.

Συστηματοποίηση Επιφανειών μέσω Θεωρίας Καταστροφών





Κίνηση πάνω σε Επιφάνειες σχετικής Σταθερότητας



Συστατικά που Συμμετέχουν στις Γνωστές Χημικές Ταλαντώσεις

