

Contents

1	Introduction	5
1.1	Dynamical systems stability	6
1.2	Dynamical systems with delay	7
1.3	Dynamical systems of neutral type	7
1.4	Optimal dynamic systems control	7
2	Main definitions of the theory	9
2.1	Definitions of the control theory	9
2.2	Definitions of the stability theory	10
3	Representation of the solution	12
3.1	Systems with same matrices	12
3.2	Systems with commutative matrices	13
3.3	Systems with general matrices	14
4	Stability of the system with delay	16
4.1	Stability research	16
5	Controllability of the system with delay	17
6	Control construction	19
7	Conclusions	20
8	References	21
9	Selected publications of the author	23