

1.	Record Nr.	UNISA990002411080203316
	Autore	FERRO-LUZZI, Federico
	Titolo	Del preambolo del contratto : valore ed efficacia del «premessso che» nel documento negoziale / Federico Ferro Luzzi
	Pubbl/distr/stampa	Milano : Giuffrè, 2004
	ISBN	88-14-11417-X
	Descrizione fisica	VIII,136 p.
	Collana	Quaderni romani di diritto commerciale , Saggi
	Disciplina	346.4502
	Collocazione	XXV.3.E. 470 (IG II 649/5)
	Lingua di pubblicazione	Italiano
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
2.	Record Nr.	UNINA9910900181003321
	Autore	Oustaloup Alain
	Titolo	Control in System Dynamics : Comparative Analysis of Feedback Strategies
	Pubbl/distr/stampa	Newark : , : John Wiley & Sons, Incorporated, , 2024 ©2024
	ISBN	1-394-33269-6
	Edizione	[1st ed.]
	Descrizione fisica	1 online resource (454 pages)
	Collana	ISTE Consignment Series
	Disciplina	620.118
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di contenuto	Cover -- Title Page -- Copyright Page -- Contents -- Preface -- Book Structure and Content -- Chapter 1. The Control Loop: Characterization and Behavior in Open Loop and Closed Loop -- 1.1. Introduction --

1.2. Definition and terminology -- 1.3. The plant -- 1.3.1. Definition -- 1.3.2. From a modeling difficulty to a pragmatic approach to disturbances -- 1.4. Functional representation of the control loop -- 1.4.1. Block diagram and corresponding transfers -- 1.4.2. Regarding the gap detector -- 1.5. Open-loop transmittance -- 1.5.1. Definition -- 1.5.2. General expression -- 1.5.3. Regarding the input impedance of the open loop -- 1.5.4. Open-loop Nichols locus: elementary form and characteristic quantities -- 1.5.5. Left-hand criterion in the Nichols plane -- 1.6. Closed-loop transmittances -- 1.6.1. Transmittance in tracking -- 1.6.2. Transmittance in regulation -- 1.6.3. A tracking-regulation dilemma? -- 1.7. Input sensitivity -- 1.7.1. Input sensitivity in tracking -- 1.7.2. Input sensitivity in regulation -- 1.7.3. Input sensitivity in tracking and regulation -- 1.8. Behavior and frequency performances in tracking and regulation -- 1.8.1. Frequency and time behavior -- 1.8.2. Frequency performances -- 1.8.3. Regarding the effect of the increase in frequency ω -- 1.9. Dynamics in tracking and regulation -- 1.10. Charts in tracking and regulation -- 1.10.1. Chart in tracking: Nichols chart -- 1.10.2. Chart in regulation: dual of the Nichols chart -- 1.10.3. Passage from the Nichols chart to its dual -- 1.10.4. A little background -- Chapter 2. The Control Loop: Stability and Stability Degree, Precision, Dynamic Performances and Controller Synthesis -- 2.1. Introduction -- 2.2. Stability -- 2.2.1. Definition -- 2.2.2. Fundamental stability condition -- 2.2.3. Stability algebraic criteria -- 2.2.4. Stability graphic criteria. 2.3. Stability margins -- 2.3.1. Gain margin -- 2.3.2. Phase margin -- 2.4. Stability degree -- 2.4.1. Time domain -- 2.4.2. Frequency domain -- 2.4.3. Comparison with pole-placement control: an observation confirmed by section 2.4.2 -- 2.5. Precision -- 2.5.1. Definition -- 2.5.2. Precision in tracking and regulation -- 2.5.3. Precision in steady state -- 2.6. Stability degree-precision dilemma -- 2.6.1. Definition -- 2.6.2. Highlighting the dilemma in the Nichols plane -- 2.6.3. Compromise between stability degree and precision, and optimum adjustment -- 2.6.4. Improving the compromise between stability degree and precision -- 2.6.5. Bringing the dilemma into question -- 2.7. Dynamics -- 2.8. Time dynamic performances -- 2.9. Frequency dynamic performances -- 2.10. Determination of dynamics -- 2.10.1. Overshoot -- 2.10.2. Damping -- 2.10.3. Rapidity -- 2.11. Study consideration for the controller synthesis -- 2.12. Controller phase at frequency -- 2.13. Type of controller -- 2.13.1. Phase-lead correction -- 2.13.2. Phase-lag correction -- 2.13.3. An additional correction to obtain a PID regulator -- 2.14. Example of a practical task: detailed study of the single phase-lead controller -- Chapter 3. An Overview of Linearizing Approaches -- 3.1. Introduction -- 3.2. Linearization by immersion -- 3.2.1. Principle -- 3.2.2. Application -- 3.3. Linearization by high gain -- 3.3.1. Principle -- 3.3.2. Application -- 3.3.3. Conclusion and comments -- 3.4. Linearization by disturbance rejection -- 3.4.1. Principle -- 3.4.2. Application -- 3.4.3. Conclusion and comments -- 3.5. Linearization of the plant around a nominal trajectory: tangent linearized -- 3.5.1. Principle -- 3.5.2. Application -- 3.6. Additional discussion provided by Brigitte d'Andréa-Novel. Chapter 4. High-Gain, Feedforward, Internal-Model, Quadratic-Criterion and Predictive Controls: From Principle to Control Loop -- 4.1. Introduction -- 4.2. High-gain control -- 4.2.1. Principle -- 4.2.2. From high-gain control to control loop -- 4.2.3. Input sensitivity -- 4.3. Feedforward control -- 4.3.1. Principle -- 4.3.2. From feedforward to reference filtering of the elementary control loop -- 4.3.3. Tracking and regulation -- 4.4. Internal-model control -- 4.4.1. Principle -- 4.4.2. From internal-model control to control loop -- 4.4.3.

Robustifying strategies -- 4.4.4. From internal model to high-gain control -- 4.5. Quadratic-criterion control -- 4.5.1. On control law synthesis -- 4.5.2. A property of linear systems that is decisive in this area -- 4.5.3. Study plant -- 4.5.4. Control objective and strategy -- 4.5.5. Regulator synthesis through minimization of a quadratic criterion -- 4.5.6. From quadratic-criterion control to control loop -- 4.6. Predictive control -- 4.6.1. Principle -- 4.6.2. From CGPC to LQ then LQG control -- 4.6.3. LQ and quadratic-criterion control -- 4.6.4. Study plant -- 4.6.5. Control law synthesis -- 4.6.6. From predictive control to control loop -- 4.6.7. On the phase-lead regulator stemming from the change to the control loop -- 4.6.8. A specific scenario suitable as the basis of an exercise or a problem -- Chapter 5. On the Three Generations of CRONE Control -- 5.1. Introduction -- 5.2. From the porous dyke to first- and second-generation CRONE control -- 5.2.1. First interpretation of the relaxation model: first-generation CRONE control -- 5.2.2. Second interpretation of the relaxation model: second-generation CRONE control -- 5.3. Second-generation CRONE control and uncertainty domains -- 5.3.1. Uncertainty domains -- 5.3.2. Particular open-loop uncertainty domains. -- 5.3.3. Adequacy of the second-generation CRONE control template to the particular uncertainty domains -- 5.4. Generalization of the vertical template through the third-generation CRONE control -- 5.4.1. First level of generalization -- 5.4.2. Second level of generalization -- 5.4.3. Open-loop transfer integrating the curvilinear template -- 5.4.4. Optimization of the open-loop behavior -- 5.4.5. Structure and parametric estimation of the controller -- 5.4.6. Application -- 5.5. An appendix on the frequency response describing the generalized template -- Solved Problems -- Presentation of Problem 1: Elementary Synthesis of a PID Regulator Based on the Single Phase-Lead Controller -- Presentation of Problem 2: Improvement of the Elementary Synthesis of a PID Regulator by Reducing Transitional Frequency Dispersion -- Presentation of Problem 3: Synthesis of a PID Regulator Based on Three Phase-Lead Controller Structures: Comparison and Choice of the Best Structure -- Presentation of Problem 4: Linearizing Control of a Motor Shaft: Linearization by Immersion -- Presentation of Problem 5: Linearizing Control of a Motor Shaft: Linearization by Disturbance Rejection -- Presentation of Problem 6: High-Gain Control: Characterization in Tracking and Regulation -- Presentation of Problem 7: Feedforward Control: Characterization in Tracking and Regulation by a Direct Approach and by an Indirect Approach via a Reference Prefilter -- Presentation of Problem 8: Synthesis of an Internal-Model Control Using a PID Controller of the Equivalent Elementary Control Loop -- Presentation of Problem 9: Quadratic-Criterion Control -- Presentation of Problem 10: Synthesis of a Constant Phase-Lead CRONE Controller: The Essential Stage in the Synthesis of the Fractional PID Whose (Integer) Integration at Low Frequency Simply Results from a Cascade Proportional-Integral. -- Presentation of Problem 11: Synthesis of a Constant Phase-Lead CRONE Controller with Successively Symmetrical and Asymmetrical Frequency Placement -- Presentation of Problem 12: Synthesis of a Constant Phase-Lag CRONE Controller and Synthesis Parameters of the Third-Generation CRONE Control -- Presentation of Problem 13: Synthesis of a Variable-Phase CRONE Controller for the Synthesis of a Narrow-Band (Vertical and Generalized) Template -- Appendices -- Appendix 1: From Regulation Function to Active Noise Control -- Appendix 2: Closed-Loop Behavior and Dynamic Performance of Second-Generation CRONE Control -- Appendix 3: Iso-overshoot Contours and Isodamping Contours -- References -- Index -- Other titles from ISTE

