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2.1.8 Detailed Design Models and Programs; 2.1.9 Process Control; 2.1.10 Estimation of Parameters 2.1.11 Experimental Design 2.1.12 Process Integration; 2.1.13 Process Synthesis; 2.1.14 Data Reconciliation; 2.1.15 Mathematical Computing Software; 2.1.16 Chemometrics; 2.2 Some Observations on the Practical Use of Modelling and Simulation; 2.2.1 Reliability of Models and Simulations; 2.2.2 The Role of Industry as Final User of Modelling and Simulation; 2.2.3 Modelling and Simulation in Innovations; 2.2.4 Role of Modelling in Technology Transfer and Knowledge Management; 2.2.5 Role of the Universities in Modelling and Simulation Development; References

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Sommario/riassunto

A description of the use of computer aided modeling and simulation in the development, integration and optimization of industrial processes. The two authors elucidate the entire procedure step-by-step, from basic mathematical modeling to result interpretation and full-scale process performance analysis. They further demonstrate similitude comparisons of experimental results from different systems as a tool for broadening the applicability of the calculation methods. Throughout, the book adopts a very practical approach, addressing actual problems and projects likely to be encountered by the
