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Autore	Asano Koichi <1926->
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4.2 Temperature and Concentration Boundary Layers4.2.1 Temperature and Concentration Boundary Layer Equations; 4.2.2 Integral Form of Thermal and Concentration Boundary Layer Equations; Example 4.1; Solution; 4.3 Numerical Solutions of the Boundary Layer Equations; 4.3.1 Quasi-Linearization Method; 4.3.2 Correlation of Heat and Mass Transfer Rates; Example 4.2; Solution; 4.4 Mass and Heat Transfer in Extreme Cases; 4.4.1 Approximate Solutions for Mass Transfer in the Case of Extremely Large Schmidt Numbers
4.4.2 Approximate Solutions for Heat Transfer in the Case of Extremely Small Prandtl Numbers [6]

Sommario/riassunto

This didactic approach to the principles and modeling of mass transfer as it is needed in modern industrial processes is unique in combining a step-by-step introduction to all important fundamentals with the most recent applications. Based upon the renowned author's successful new modeling method as used for the O-18 process, the exemplary exercises included in the text are fact-proven, taken directly from existing chemical plants.Fascinating reading for chemists, graduate students, chemical and process engineers, as well as thermodynamics physicists.