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Autore	Wijngaarden R. J (Ruud J.)
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Sommario/riassunto

Designed to improve both skills and confidence in troubleshooting, this book covers the chemical point of view for engineers, and the engineering point of view for chemists. It introduces mathematical tools that can be used to calculate the effectiveness of catalyst pellets as a function of shape, size, pore size, type of kinetics and diffusion, as well as temperature and pressure conditions -- a method applicable to laboratory as well as large-scale operations. The practical value of the text is enhanced by some 30 examples of optimizing catalysts and troubleshooting.