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Nota di contenuto	Introduction -- Model Comparison for Phase Equilibrium in Heavy Oil/Steam/Solvent Related Systems -- Multiphase Isenthalpic Flash using the Conventional Flash Framework -- Modified RAND Framework for Phase Split Calculations -- EoS Based Thermal Reservoir Simulation -- Conclusions and Future Work.
Sommario/riassunto	This book investigates a wide range of phase equilibrium modelling and calculation problems for compositional thermal simulation. Further, it provides an effective solution for multiphase isenthalpic

flash under the classical framework, and it also presents a new flash calculation framework for multiphase systems, which can handle phase equilibrium and chemical reaction equilibrium simultaneously. The framework is particularly suitable for systems with many phases and reactions. In this book, the author shows how the new framework can be generalised for different flash specifications and different independent variables. Since the flash calculation is at the heart of various types of compositional simulation, the findings presented here will promote the combination of phase equilibrium and chemical equilibrium calculations in future simulators, aiming at improving their robustness and efficiency.