DESCRIPTION

“Polymorphism in the Pharmaceutical Industry - Solid Form and Drug Development” highlights the relevance of polymorphism in modern pharmaceutical chemistry, with a focus on quality by design (QbD) concepts. It covers all important issues by way of case studies, ranging from properties and crystallization, via thermodynamics, analytics and theoretical modelling right up to patent issues.

As such, the book underscores the importance of solid-state chemistry within chemical and pharmaceutical development. It emphasizes why solid-state issues are important, the approaches needed to avoid problems and the opportunities offered by solid-state properties. The authors include true polymorphs as well as solvates and hydrates, while providing information on physicochemical properties, crystallization thermodynamics, quantum-mechanical modelling, and up-scaling. Important analytical tools to characterize solid-state forms and to quantify mixtures are summarized, and case studies on solid-state development processes in industry are also provided.

Written by acknowledged experts in the field, this is a high-quality reference for researchers, project managers and quality assurance managers in pharmaceutical, agrochemical and fine chemical companies as well as for academics and newcomers to organic solid-state chemistry.
ABOUT THE AUTHOR

**Rolf Hilfiker** is vice president and head of the department Solid-State Development at Solvias AG in Kaiseraugst, Switzerland. He obtained his PhD in physical chemistry from Basel University (Switzerland) and then did postdoctoral work at Stony Brook University (New York). He returned to Basel University as a research fellow and then moved to Ciba-Geigy (now Novartis) in Basel. In 1997 he became head of the Stability & Kinetics group at Novartis. In 1999 he participated in a management buyout to form Solvias AG. He has taught physical chemistry in New York and Basel, as well as numerous courses in solid-state development in Europe, Asia, and the US.

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