

Additions and Corrections

Metalloenediynes: Ligand Field Control of Thermal Bergman Cyclization Reactions [*J. Am. Chem. Soc.* **2000**, *122*, 7208–7217]. PEDRO J. BENITES, DIWAN S. RAWAT, AND JEFFREY M. ZALESKI*

Page 7210: The syntheses of metalloenediyne precursors 1,8-bis(tetrahydropyran-2-yloxy)oct-4-ene-2,6-diyne and 1,8-dibromooct-4-ene-2,6-diyne were prepared from a modified literature procedure (König, B.; Pitsch, W.; Dix, I.; Jones, P. G. *Synthesis* **1996**, 446–448) which was inadvertently omitted from the references. We thank Dr. Burkhard König for preprints regarding these procedures and bringing the oversight to our attention.

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Book Reviews

Solubility and Solubilization in Aqueous Media. By Samuel H. Yalkowsky (University of Arizona). Oxford University Press: New York, 1999. xvi + 464 pp. \$165. ISBN 0-8412-3576-7

Solubility and solubilization are important and critical areas in the design of drug delivery systems. This book is expertly written and provides the reader with both a theoretical and practical approach to solubility and techniques of solubilization.

The book is divided into 10 instructive and well-referenced chapters. The contents of Chapter 1 provide information about the thermodynamics of mixing and the properties of mixtures. Ideal and real mixtures are compared and contrasted from a theoretical viewpoint. A concise discussion of colligative properties is also presented. The next chapter contains an in-depth characterization of solutions. The reader is led through a logical presentation of the modeling of solutions, with a discussion including models for ideal, athermal, regular, solvated, and self-associated solutions.

Chapter 3 begins the discussion of the parameters that determine the miscibility of one liquid with another. A highlight is an instructive review of the influence of temperature and solution composition on solubility. The following chapter offers a relevant discussion of solute modification for enhancing the dissolution rate of drugs, especially poorly soluble ones. The next chapters provide the reader with a

fundamental understanding of the techniques used to enhance the solubilization of a solute and gives practical examples of each. These chapters are particularly important for pharmaceutical scientists working to increase the bioavailability of drugs by enhancing their aqueous solubility through strategies such as pH control, the use of cosolvents and surface-active agents, and complexation.

Chapter 9 summarizes the influence of a cosolute—which includes isomers, racemates, solvates, reaction-starting materials, intermediates, degradation products, impurities, or deliberately introduced materials—on solubility of the solute of interest. A strategy for solubilization is presented in detail in the concluding chapter. This chapter provides the reader with a well-thought-out approach to follow for enhancing the solubility of a solute based on information presented in the previous chapters.

Overall, this book is highly recommended for scientists involved with enhancing solute solubility, especially those working in the field of pharmaceutical drug delivery.

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